

# LEGISLATION ADDRESSING NEW SOURCE REVIEW PERMITTING REFORM

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## HEARING BEFORE THE SUBCOMMITTEE ON ENVIRONMENT OF THE COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES ONE HUNDRED FIFTEENTH CONGRESS SECOND SESSION

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<sup>1</sup> The committee did not receive a response to Mr. Holmstead's submitted questions for the record by the time of printing.



## LEGISLATION ADDRESSING NEW SOURCE REVIEW PERMITTING REFORM

WEDNESDAY, MAY 16, 2018

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON ENVIRONMENT,  
COMMITTEE ON ENERGY AND COMMERCE  
*Washington, DC.*

The subcommittee met, pursuant to call, at 10:15 a.m., in room 2322 Rayburn House Office Building, Hon. John Shimkus (chairman of the subcommittee) presiding.

Members present: Representatives Shimkus, McKinley, Barton, Harper, Olson, Johnson, Flores, Hudson, Walberg, Carter, Duncan, Walden (ex officio), Tonko, Ruiz, Peters, Green, Dingell, Matsui, and Pallone (ex officio).

Also present: Representative Griffith.

Staff present: Samantha Bopp, Staff Assistant; Daniel Butler, Staff Assistant; Kelly Collins, Legislative Clerk, Energy and Environment; Wyatt Ellertson, Professional Staff Member, Energy and Environment; Margaret Tucker Fogarty, Staff Assistant; Jordan Haverly, Policy Coordinator, Environment; Mary Martin, Chief Counsel, Energy and Environment; Drew McDowell, Executive Assistant; Peter Spencer, Senior Professional Staff Member, Energy; Austin Stonebraker, Press Assistant; Hamlin Wade, Special Advisor, External Affairs; Jeff Carroll, Minority Staff Director; Jean Fruci, Minority Energy and Environment Policy Advisor; Caitlin Haberman, Minority Professional Staff Member; Rick Kessler, Minority Senior Advisor and Staff Director, Energy and Environment; Jourdan Lewis, Minority Staff Assistant; Alexander Ratner, Minority Policy Analyst; C.J. Young, Minority Press Secretary; and Catherine Zander, Minority Environment Fellow.

### OPENING STATEMENT OF HON. JOHN SHIMKUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. SHIMKUS. The Subcommittee on Environment and the Economy will now come to order. The chair recognizes myself for 5 minutes for an opening statement.

At today's hearing, we are examining a discussion draft led by Mr. Griffith which reforms the New Sources Review program. The goal of this discussion draft is to add greater certainty to the New Source Review permitting process, making it easier for industry to modernize existing facilities and carry out environmentally beneficial projects.

At a February hearing in this subcommittee, we learned that the uncertainty, complexity, and burdens associated with New Source

Review permitting programs are deterring companies from properly maintaining and upgrading existing manufacturing plants, power plants, refineries, and industrial facilities. This is disappointing because it means we are missing out on opportunities to increase the Nation's industrial capacity to create more American jobs and to improve our environment.

The discussion draft before us today reforms the New Source Review program by clarifying which types of facility upgrades require an owner to obtain a New Source Review permit. Historically, there has been a great deal of controversy and uncertainty surrounding this very issue. The main reason for this controversy is due to the fact that the New Source Review program uses a complicated annual emissions projection approach to determine whether a project triggers New Source Review.

Projecting future annual emissions is a difficult and confusing process, requiring the consideration of many complex factors, such as future demand of the product being produced and a facility's future hours of operation. Because of this complexity, it is difficult for companies to know whether they are correctly projecting a facility's future annual emissions and in many instances companies are being targeted by EPA enforcement actions for having carried out these emission projects incorrectly. The end result of this regulatory confusion and enforcement risk is that many companies are choosing to not modernize and upgrade their existing facilities because they fear that these types of activities could trigger the New Source Review permitting process.

In contrast, the New Source Performance Standards program under the Clean Air Act uses a much better test to determine if an emissions increase has occurred, known as the hourly emissions rate test. This hourly rate test has proven to be much less controversial, much easier to carry out, and only relies upon engineering design factors, not complicated future emissions projections. The hourly rate test simply looks at whether a project at an existing facility will increase the facilities ability to release emissions at a higher hourly rate.

In order to provide more certainty to the New Source Review program, the discussion draft takes the hourly rate test used by the New Source Performance Standard program, applies that same test to the New Source Review program. I am doing that because I don't like to say NSPS and NSR all the time. This targeted reform to the New Source Review program would provide much-needed regulatory clarity and would make it easier for companies to properly maintain and modernize their facilities.

Lastly, the discussion draft before us today includes provisions making it easier for owners to carry out pollution control projects, energy efficiency upgrades, and projects that keep facilities in good working order. The fact that the New Source Review program can be a barrier to projects that would result in better air quality is unacceptable. We have to remove the red tape that is discouraging companies from doing things like installing carbon capture technology or making manufacture equipment more fuel efficient. This discussion draft does exactly that.

At our hearing this morning, we will first hear from EPA Assistant Administrator Wehrum who will explain the agency views on

this discussion draft. And then we will hear from a second panel of witnesses consisting of state air regulators, industry witnesses, and Clean Air Act experts who will provide important perspectives on how this bill address New Source Review reform.

With that, I'd like to thank Congressman Morgan Griffith for the good work he has done on this bill and I'd like to thank our witnesses for joining us this morning.

And I have 5 minutes left, so I yield back my time and I will yield to the ranking member of the subcommittee, Mr. Tonko, for 5 minutes.

[The prepared statement of Mr. Shimkus follows:]

#### PREPARED STATEMENT OF HON. JOHN SHIMKUS

At today's hearing we are examining a discussion draft lead by Mr. Griffith, which reforms the New Source Review (NSR) program. The goal of this discussion draft is to add greater certainty to the NSR permitting process, making it easier for industry to modernize existing facilities and to carry out environmentally beneficial projects.

At a February hearing in this Subcommittee, we learned that the uncertainty, complexity, and burdens associated with the NSR permitting program are deterring companies from properly maintaining and upgrading existing manufacturing plants, power plants, refineries, and industrial facilities. This is disappointing because it means we are missing out on opportunities to increase the nation's industrial capacity, to create more American jobs, and to improve our environment.

The discussion draft before us today reforms the NSR program by clarifying which types of facility upgrades require an owner to obtain an NSR permit. Historically, there has been a great deal of controversy and uncertainty surrounding this very issue. The main reason for this controversy is due to the fact that the NSR program uses a complicated annual emissions projection approach to determine whether a project triggers NSR.

Projecting future annual emissions is a difficult and confusing process, requiring the consideration of many complex factors, such as the future demand of the product being produced and a facility's future hours of operation. Because of this complexity, it is difficult for companies to know whether they are correctly projecting a facility's future annual emissions, and in many instances, companies are being targeted by EPA enforcement actions for having carried out these emissions projections incorrectly. The end result of this regulatory confusion and enforcement risk is that many companies are choosing to not modernize and upgrade their existing facilities because they fear that these types of activities could trigger the NSR permitting process.

In contrast, the New Source Performance Standards (NSPS) program under the Clean Air Act uses a much better test to determine if an emissions increase has occurred known as the hourly emissions rate test. This hourly rate test has proven to be much less controversial, much easier to carry out, and only relies upon engineering design factors, not complicated future emissions projections. The hourly rate test simply looks at whether a project at an existing facility will increase that facility's ability to release emissions at a higher hourly rate.

In order to provide more certainty to the NSR program, the discussion draft takes the hourly rate test used by the NSPS program and applies that same test to the NSR program. This targeted reform to the NSR program would provide much needed regulatory clarity and would make it easier for companies to properly maintain and modernize their facilities.

Lastly, the discussion draft before us today includes provisions making it easier for owners to carry out pollution control projects, energy efficiency upgrades, and projects that keep facilities in good working order. The fact that the NSR program can be a barrier to projects that would result in better air quality is unacceptable. We have to remove the red tape that is discouraging companies from doing things like installing carbon capture technology or making manufacturing equipment more fuel efficient; this discussion draft does exactly that.

At our hearing this morning, we will first hear from EPA Assistant Administrator Wehrum who will explain the Agency's views on this discussion draft, and then we will hear from a second panel of witnesses consisting of State Air regulators, industry witnesses, and Clean Air Act experts, who will provide important perspectives on how this bill addresses NSR reform.

With that, I'd like to thank Mr. Griffith for the good work he has done on this bill, and I'd like to thank our witnesses for joining us this morning.

**OPENING STATEMENT OF HON. PAUL TONKO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK**

Mr. TONKO. Thank you, Mr. Chair, and we have a magic clock this morning.

I also want to thank EPA Assistant Administrator Wehrum and other witnesses who are joining us today for attending the hearing.

First, Mr. Chair, I want to congratulate you on getting the nuclear waste bill through the House last week. This subcommittee has demonstrated it can get difficult things done in a bipartisan fashion. However, I am afraid the discussion draft we are considering today will not be added to that list. I am not interested in Clean Air Act amendments that will result in dirtier air.

EPA's New Source Review program plays an important role to ensure that new and modified major sources utilize the best available pollution controls to limit emissions of criteria pollutants. But in recent months, EPA has issued a number of troubling Clean Air Act policy changes, including to the NSR program by memorandum.

In December 2017, EPA announced that it will not second guess permit applicants' analysis on emissions projections nor enforce against applicants that provide invalid estimates. In January 2018, EPA withdrew the long-standing "once in always in" policy for major source MACT standards, and in March 2018 the EPA decided to change the project emissions accounting formula that will allow facilities to ignore contemporaneous emissions increases. These are not new ideas. Some were tried over a decade ago by Administrator Wehrum during the Bush administration through the rulemaking process.

Sadly, EPA's political leadership has spent its time reviving these policies rather than taking any proactive steps to actually reduce air pollution and, make no mistake, today's discussion draft is no different. The draft would make a number of changes to EPA's New Source Review program. The NSR program is probably the most important Clean Air Act program for controlling pollution from new sources. It might surprise some of my colleagues to learn that was a quote from Mr. Holmstead's testimony, who will be a witness on today's second panel. And to be fair to him, he also said the NSR program was not intended to be a key program for controlling emissions from existing facilities.

Now, if we are being honest, we also must acknowledge that in the 1970s, Congress did not intend for existing facilities to be able to avoid installing pollution control technology for 40 years. But that has been the case for many facilities across our country, which were grandfathered into the program until they underwent a major modification. The NSR modification rules attempted to ensure that, over time, existing sources add pollution controls when those facilities made investments and upgrades that increased emissions.

Among other things, the discussion draft would change the definition of modification at an existing source to consider whether it would increase the maximum achievable hourly emissions rate rather than total annual emissions. This would permit facilities to



make upgrades that do not increase hourly emissions but do enable the source to operate much more frequently, which will greatly increase overall pollution.

We will hear that the NSR program is preventing facilities from undertaking efficiency and reliability upgrades. But we are failing our constituents if we do not acknowledge that operation of these facilities comes with a serious cost—harmful air pollution and oftentimes a lot of it. That, frankly, could be drastically reduced with pollution controls. Today, many old coal-fired power plants are entering end of useful life unless they undertake significant capital investments.

Under the current NSR program, if these facilities make a major modification, the grandfathering is over and modern pollution controls would need to be installed. This has caused these facilities to call the program unworkable. The reality is they just do not like how it works. The discussion draft before us today would enable those old facilities, which have put off adopting modern pollution controls for decades, to continue polluting out air indefinitely.

Just yesterday, the Center for Public Integrity reported that in 2017, nearly a quarter of the Nation's coal-fired power plants lacked pollution controls limiting emissions of sulfur dioxide and, on average, plants without scrubbers discharged more than twice the amount of SO<sub>2</sub>. One hundred and seven of the 145 coal plants without control technology for sulfur dioxide were built prior to 1978.

We know how to reduce harmful air pollution, and I understand that businesses need time to transition and plan for the investments needed to install pollution controls. But many of these facilities have had four decades. The Clean Air Act has been successful because it is premised on making progress over time.

Since the 1970s, we have made major strides in reducing air pollution. We have demonstrated that we can grow the economy while protecting public health. But allowing major polluters to extend their lives while avoiding installation of avoidable technology to prevent unnecessary pollution is unacceptable and runs counter to the bipartisan intent of the Clean Air Act. I believe we will not be able to find common ground based on the discussion draft under consideration today.

Moving forward, I hope this subcommittee and EPA will abandon these notions and policy memos and get back to considering policies that will actually reduce air pollution and improve public health in our country.

With that, Mr. Chair, I thank you and yield back.

Mr. SHIMKUS. Gentleman yields back his time.

The chair now recognizes the chairman of the full committee, Congressman Walden, for 5 minutes.

**OPENING STATEMENT OF HON. GREG WALDEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON**

Mr. WALDEN. Thank you very much, Mr. Chairman, and to everyone just thank you for being here today.

Today's legislative hearing represents another important step in this committee's work to advance reasonable updates to our environmental laws. Our goal has always been to ensure more effective

environmental programs and also a more productive economy. A clean environment and a strong economy are not mutually exclusive.

The draft legislation being developed under the leadership of Representative Morgan Griffith aims to address problems that have been identified in the Clear Air Act's New Source Review program, and I know he has a very specific example that he shared with us about how we need to modernize these laws. This legislation reflects the Committee's goal to implement reforms that will more efficiently preserve and improve air quality. It will also help responsibly reduce barriers to increasing productivity of manufacturers and industries in communities around our country.

New Source Review was initially developed some 40 years ago. It's well past time for reform. Over the past several decades, the program has evolved in regulatory complexity, leading to time-consuming permit decisions, expensive regulatory requirements, and, frankly, litigation.

We learned in testimony 3 months ago how costly and lengthy reviews associated with NSR permitting can lead businesses to forego making beneficial investments in existing facilities and these investments can include efficiency upgrades, pollution control projects and other environmentally beneficial changes to operations.

This does not make sense. Decisions to not make such investments deprive communities of the benefits gained from environmental improvements, in addition to the increased jobs and economic activity that flow from this activity.

We learned that even when facilities choose to run the NSR gauntlet with efficiency projects, the result is unnecessary expense and costly delay, with the required bureaucracy providing no additional environmental benefit. In addition, state and local permit authorities are tied up on the NSR matters instead of working on more pressing environmental reviews.

I mentioned before the needless costs of poorly administered environmental regulations and the example of a proposed data center expansion in my district in Pineville, Oregon. That expansion ran headlong into permitting issues because of a dispute over a single air monitor, which made it unclear whether the expansion could go forward. It was only after the city of Pineville persuaded the EPA to add an additional air sampling location that the issue cleared and the expansion was able to go forward. That instance involved hundreds of millions of dollars in investments and hundreds of construction jobs.

At our NSR hearing earlier this year, we learned of a case in the pulp and paper and packaging industry in which a facility was forced to make more than \$100,000 in additional assessments and incurred substantial delay for a project that would actually reduce pollution.

In another project, a paper mill sought to shut down two older and inefficient boilers and upgrade a large boiler to meet the same power needs more efficiently. But due to EPA NSR interpretations that ignored the replaced boilers, this project was subject to 18 months in costly red tape and scope adjustments, again, for a project that would not increase emissions.

We should have an NSR program that presents clear standards for when reviews are necessary. This will lead to more efficient business decisions, more efficient permitting decisions, and more environmentally beneficial operations. We should have a program that works within the broader framework of state decision making concerning permitting and meeting clean air standards.

I am looking forward to hearing from EPA's assistant administrator for Air and from our second panel, which includes state, industry, and legal perspectives. These discussions will go a long way in helping us perfect the discussion draft.

So I want to thank Mr. Griffith. Morgan, thank you for your hard work on this specific piece of legislation. I think we are taking really important steps to both grow America's economy and improve our air quality and the environment. Doing this will ultimately benefit American workers, consumers, and others around the country.

With that, Mr. Chairman, unless someone wants the remainder of my time, Mr. Griffith, do you want to make any comments? With the remaining minute I would so yield.

[The prepared statement of Mr. Walden follows:]

#### PREPARED STATEMENT OF HON. GREG WALDEN

Today's legislative hearing represents another important step in this Committee's work to advance reasonable updates to our environmental laws. Our goal has always been to ensure more effective environmental programs and also a more productive economy. A clean environment and strong economy are not mutually exclusive.

The draft legislation being developed under the leadership of Morgan Griffith, aims to address problems that have been identified in the Clean Air Act's New Source Review program. This legislation reflects the Committee's goal to implement reforms that will more efficiently preserve and improve air quality. It will also help responsibly reduce barriers to increasing productivity of manufacturers and industry in communities around the nation.

New Source Review was initially developed some 40 years ago—and it is well past time for reform. Over the past several decades, the program has evolved in regulatory complexity, leading to time-consuming permit decisions, expensive regulatory requirements, and litigation.

We learned in testimony 3 months ago how costly and lengthy reviews associated with NSR permitting can lead businesses to forego making beneficial investments in existing facilities. These investments can include efficiency upgrades, pollution control projects, and other environmentally beneficial changes to operations.

This does not make sense: decisions to not make such investments deprive communities of the benefits gained from environmental improvements, in addition to the increased jobs and economic activity that flow from this activity.

We learned that even when facilities choose to run the NSR gauntlet with efficiency projects, the result is unnecessary expense and costly delay—with the required bureaucracy providing no additional environmental benefit. In addition, state and local permit authorities are tied up on NSR matters instead of working on more pressing environmental reviews. I've mentioned before the needless costs of poorly administered environmental regulations in the example of a proposed data center expansion in Pineville, Oregon, in my district. That expansion ran headlong into permitting issues because of a dispute over a single air monitor, which made it unclear whether the expansion would go forward. It was only after the city persuaded EPA to add an additional air sampling location that the issue cleared and the expansion moved forward. That instance involved hundreds of millions of dollars in investments and hundreds of construction jobs.

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to EPA NSR interpretations that ignored the replaced boilers, this project was subject to 18 months of costly red tape, and scope adjustments—again, for a project that would not increase emissions.

We should have an NSR program that presents clear standards for when reviews are necessary: this will lead to more efficient business decisions, more efficient permitting decisions, and more environmentally beneficial operations. We should have a program that works within the broader framework of state decision-making concerning permitting and meeting clean air standards.

I'm looking forward to hearing from EPA's Assistant Administrator for Air, Bill Wehrum, and from our second panel, which includes state, industry, and legal perspectives. These discussions will go far in perfecting the discussion draft.

I also want to thank Mr. Griffith for his hard work on the draft to date. He is taking important steps that will provide for economic expansion, while maintaining environmental protections. Doing this will ultimately benefit American workers and consumers around the Nation.

Mr. GRIFFITH. I thank you, Mr. Chairman, and I appreciate the kinds words. I will be discussing this but I think one thing we have to remember, as everybody else has pointed out, this is not just about the big businesses or the big electric plants. It's about small businesses as well, and I will detail how a medium-sized business in my district has been impacted on this and how silly it is when you're trying to deal with issues that have nothing to do with air pollution. You're just trying to make your factory better.

Also, we sometimes ignore, and I thought it was interesting in Mr. Tonko's opening statement, he said, nobody intended for this to last for 40 years without people doing upgrades. The problem is the rule itself forced people not to do upgrades because they couldn't afford to completely redo the facility.

How much cleaner would the air be if we'd have had reasonable rules in place from the get-go that would have let them slowly move forward a little bit at a time instead of having to eat the whole apple in one swallow?

I yield back.

Mr. SHIMKUS. The gentleman—

Mr. WALDEN. And I yield back as well.

Mr. SHIMKUS. The gentleman yields back his time.

The chair recognizes the ranking member of the full committee, Congressman Pallone from New Jersey, for 5 minutes.

Mr. PALLONE. Thank you, Mr. Chairman.

We are here this morning to discuss draft legislation to amend the New Source Review permitting program of the Clean Air Act and I am pleased that Paul Baldauf, the Assistant Commissioner for Air Quality, Energy, and Sustainability at New Jersey's Department of Environmental Protection, is here as a witness. Good to see you.

The NSR program has existed since the 1970s but it's not been as effective in reducing air pollution as Congress hoped. Lax enforcement and the ability to exploit legal loopholes have helped or have allowed old facilities to game the system, and too often these facilities have been able to avoid installing modern pollution controls, which has left neighboring communities exposed to tons of dangerous pollution.

And these pollution problems are not only local; they also impact downwind states like New Jersey. With all the pollution control technology development over the past 40 years, there is no reason for any facility to operate without modern pollution control equip-

ment. The ultimate test for any legislation to reform the NSR program is simply this: Will it reduce air pollution? And by that test, this bill fails.

There is no doubt this bill will increase pollution. Republicans are simply resurrecting previously rejected ideas promoted during the Bush administration by two of today's witnesses—Assistant Administrator Wehrum and Mr. Holmstead. Together, they have worked for years to undermine the NSR program. And when we enacted the NSR program, Congress recognized that existing facilities would need time to plan for and install pollution controls and that's why existing facilities were required to install new equipment when undergoing capital improvements, expansions, and life-extending renovations.

But industries have spent years employing legions of attorneys with the sole mission of creating carve-outs in the NSR program for their clients just to avoid controlling their pollution. And so what happened? We ended up with the situation Congress tried to avoid—new facilities disadvantaged to the benefit of old polluting ones that have remained around well past their design life.

The proponents of this bill claim it will fix this problem but it will not. Without a firm requirement that facilities reduce the levels of all the dangerous pollution they emit, they simply will be allowed to pollute more and that's what the language in this bill on maximum achievable hourly emissions rate is all about.

Rather than closing loopholes in the NSR program, this draft bill expands them. It continues to disadvantage new facilities by allowing old facilities to operate without modern pollution controls. If these changes go forward, air pollution will only increase. Communities that have fought to reduce toxic air pollutants including benzene, mercury, and other dangerous chemicals will see pollution and their health problems increase, and that means more asthma attacks and more people getting cancer and heart disease and lung disease.

And Congress never intended to grant a permanent license to pollute to any facility. But that is exactly what this legislation would achieve. The provisions in this bill will guarantee that no existing facility will be subject to the NSR program when it's modernized or expanded and it will ensure the public will be subject to greater pollution from these plants after they are modified.

And no one has a choice about breathing. Each of us does it between 17,000 and 23,000 times every day. However, we can choose to limit air pollution so that each breath delivers the clean and healthy air we need. The NSR program can certainly be improved but not with this bill.

It's long past time for old coal-fired generation and refineries to reduce their emissions and do their fair share to keep the air clean and safe to breathe.

I don't know if anyone wants my minute or so. If not, Mr. Chairman, I will yield back.

Mr. SHIMKUS. The chair thanks the gentleman and the gentleman yields back his time.

We now conclude with members' opening statements. The chair would like to remind members that pursuant to committee rules, all members' opening statements will be made part of the record.

We want to thank all of our witnesses for being here today and taking the time to testify before this subcommittee.

Today's witnesses will have the opportunity to give opening statements followed by a round of questions from members.

Our first witness panel for today's hearing includes the Honorable William Wehrum, Assistant Administrator for the Office of Air and Radiation, U.S. Environmental Protection Agency.

We appreciate you all being here today. We will begin the panel and, Mr. Wehrum, you're now recognized for 5 minutes for your opening statement. Your full statement has been submitted for the record.

**STATEMENT OF THE HONORABLE WILLIAM WEHRUM, ASSISTANT ADMINISTRATOR FOR THE OFFICE OF AIR AND RADIATION, U.S. ENVIRONMENTAL PROTECTION AGENCY**

Mr. WEHRUM. Thank you, Chairman Shimkus, Ranking Member Tonko, and members of the subcommittee.

I appreciate the opportunity to testify today on the New Source Review permitting program. Although the administration does not have an official position on the draft, I am very supportive of the committee's efforts to improve the NSR permitting program.

I have long believed that the NSR permitting program stands as a significant barrier to the implementation of many projects that would improve facility and performance, enhance efficiency, and protect the environment. In addition, the program is unnecessarily complicated and confusing. The program can and should be improved.

In accordance with the administration wide priorities for streamlining permitting requirements for manufacturing, we have undertaken an assessment of the agency's implementation of the NSR program.

We quickly and, I would have to say, predictably identified several areas that are ripe for improvement. In December 2017 and March of 2018, Administrator Pruitt issued memoranda to EPA's regional offices to provide greater clarity as to how certain NSR rules should be interpreted.

The December memo focused on NSR permitting applicability provisions. That memo set forth EPA's interpretation of the procedures contained in the NSR rules for sources that intend to use projected actual emissions in determining NSR applicability and the associated pre- and post-project source obligations.

The March memo set forth EPA's interpretation that in determining whether a proposed project will result in a significant emissions increase, which is the initial step that a source must take in determining whether the project will result in an overall significant net emissions increase, that any emissions decreases that are projected to occur as a result of the project also should be taken into account in this first NSR applicability step.

We have done other things as well. In April of 2018, we issued a memoranda on so-called significant emissions levels, which are common sense provisions intended to simplify and expedite the permitting process and the analysis that's necessary to go along with the permitting process focus on air quality.

In January of 2018, although this is not strictly an NSR issue, as has been mentioned already we issued clarifying guidance on the so-called “once in always in” policy under our air toxics programs. Regarding the subcommittee’s discussion draft, the administration does not have an official position on the bill. But as I’ve said before, I personally strongly support the overall goals of the discussion draft.

The principal focus of the discussion draft is on refining the definition of modification in the Clean Air Act, and that would go a long way towards simplifying application of the NSR program. It would make clear that a project undertaken in the existing stationary source will trigger NSR only when that project would result in an increase in the source’s maximum design capacity to emit. That is, the project would result in an increase in a source’s hourly emissions rate, which is how emissions increases have been determined under the New Source Performance Standard program since its inception.

The bill would also resolve a long-standing and unfortunate anomaly in the NSR program, which is that the installation of pollution control equipment at existing sources by itself can trigger the onerous New Source Review program.

I appreciate the opportunity to testify today. I support the Committee’s effort to provide clarity for the regulated community that can finally allow the private sector to invest in more efficient manufacturing in this country and I welcome any questions you may have regarding the discussion draft for the agency efforts to improve the NSR program.

Thank you again.

[The prepared statement of Mr. Wehrum follows:]

**Opening Statement of William L. Wehrum**  
**Assistant Administrator**  
**Office of Air and Radiation**  
**U.S. Environmental Protection Agency (EPA)**  
**EPA's New Source Review Program**  
**May 16, 2018**

Chairman Shimkus, Ranking Member Tonko, and Members of the Subcommittee: thank you for the opportunity to testify today on the New Source Review (NSR) permitting program discussion draft. Although the Administration does not have an official position on this draft, I am very supportive of the Committee's efforts to improve the NSR permitting program. I have long believed that the NSR permitting program stands as a significant barrier to the implementation of many projects that would improve facility performance, enhance efficiency, and protect the environment. In addition, the program is unnecessarily complicated and confusing. The program can and should be improved.

Toward that end, and consistent with the Administration's efforts on regulatory reform and permit streamlining, as well as Administrator Pruitt's back-to-basics agenda for the Agency, EPA is pursuing a series of targeted changes to the NSR program. In my testimony, I provide a brief background on the NSR program, discuss a few of our NSR improvement efforts, and provide some thoughts on the Subcommittee's discussion draft.

The NSR permitting program is designed to protect air quality when large-emitting facilities like factories, industrial boilers, and power plants are newly built or undergo changes that result in significant emissions increases. NSR permitting assures that new or modified facilities employ state-of-the-art air pollution controls. The program is based on the sensible notion that significant investments in air pollution controls are most appropriately made when new, large-emitting facilities are built and when existing facilities are significantly modified.



EPA established a framework for the NSR program in its federal regulations. States are required to implement an NSR program as part of their Clean Air Act “State Implementation Plan” (SIP). As with most SIP requirements, States have flexibility in how they design and implement their NSR programs. But, all state programs must be at least as environmentally effective as the base federal program. EPA implements the NSR program in states that do not have approved programs and in other areas of federal jurisdiction.

In its current form, the NSR program is very complex and can be time consuming to implement. In the absence of additional statutory clarity, EPA is working on two separate but related tracks. First, we are looking at ways to simplify and improve the NSR permitting program. Second, we are looking at ways to expedite the federal permitting process.

In accordance with Administration-wide priorities for streamlining permitting requirements for manufacturing, EPA undertook an assessment of the Agency's implementation of the NSR permitting program. We quickly (and predictably) identified several areas that are ripe for improvement.

In December 2017 and in March 2018, Administrator Pruitt issued memoranda to EPA's regional offices to provide greater clarity as to how certain NSR rules should be interpreted.

The December memorandum focused on the NSR permitting applicability provisions. That memorandum set forth EPA's interpretation of the procedures contained in the NSR Rules for sources that intend to use “projected actual emissions” in determining NSR applicability and the associated pre- and post-project source obligations. One key aspect of this memorandum is that it clarifies that so long as a company complies with the requirements of the required preconstruction projected future emissions analysis, EPA will not “second-guess” a company's reasonable analysis.

The March memorandum set forth EPA's interpretation that, in determining whether a proposed project will itself result in a “significant emissions increase” (which is the initial step that a source must take in ascertaining whether its proposed project will result in an overall significant emission increase at the source) any emissions *decreases* that are projected to occur as a result of the project can also be taken into account in this first step of the NSR applicability

analysis. This common sense reading of the plain language of our NSR rules will pay big dividends in simplifying the NSR permitting analysis while at the same time having no adverse environmental effects.

These memoranda represent EPA's interpretation of existing regulatory language and reflect topics that could be further clarified for state and local permitting authorities and affected sources. While each state and local program is different, states generally should be able to implement the recently issued guidances without the need for changes to their state implementation plans.

In addition to the memoranda, EPA has also developed policies on several related issues which may be of interest to the Subcommittee.

- In April 2018, EPA's Office of Air and Radiation issued final guidance recommending "Significant Impact Levels" for ozone and fine particle pollution that may be used in the Prevention of Significant Deterioration (PSD) permitting program. These levels will reduce the cost and time for manufacturers to obtain this type of air pollution permit.
- In January 2018, based on a plain language reading of the Clean Air Act, EPA issued a guidance memorandum withdrawing the 1995 "Once In, Always In" policy for the classification of major sources of hazardous air pollutants (HAPs) under section 112 of the Clean Air Act. With the new guidance, sources of hazardous air pollutants previously classified as "major sources" (the source emissions threshold is 10 tons per year of any one HAP or 25 tons per year of any combination of HAPs) may be reclassified as "area" sources (simply put, any source of HAP emission that isn't a "major source") when the facility limits its potential to emit below major source thresholds. EPA's old approach discouraged sources from taking enforceable measures to reduce their HAP emissions below the major source threshold. This new approach provides them an incentive to do so. EPA will be following up this memorandum with rulemaking.
- While most NSR permits are issued by state or local air pollution agencies, EPA does issue permits in some cases. To expedite issuance of these federal permits, EPA is looking for ways to increase the efficiency of the permitting process and shorten the amount of time it takes to get an EPA issued permit under both Title V and NSR.

Regarding the subcommittee's discussion draft, the Administration does not have an official position on the bill. Having said that, I strongly support the overall goals of the discussion draft. The principal focus of the discussion draft on refining the definition of "modification" in the Clean Air Act would go a long way towards simplifying application of the NSR program. It makes clear that a project undertaken at an existing stationary source will trigger NSR only when that project would result in an increase in the source's maximum design capacity to emit – that is, result in an increase in the source's hourly emission rate, which is how emissions increases have always been determined under EPA's New Source Performance Standards Program (NSPS) program.

The bill also would resolve a long-standing and unfortunate anomaly in the NSR program, which is that the installation of pollution control equipment at existing sources can *itself* trigger NSR. This is because, sometimes, the operation of such equipment, while it results in tremendous emissions reductions for some pollutants, may in some instances actually lead to increases in the emissions of other pollutants. EPA has in the past attempted to incorporate into its NSR rules an exclusion for the installation and operation of pollution control projects, where the overall effect of such controls would be environmentally beneficial. But this prior regulatory effort was held to be unlawful by the D.C. Circuit, on the grounds that it would be inconsistent with the statutory language defining "modification." The proposed bill would fix this problem.

I appreciate the opportunity to testify today. I support the Committee's effort to provide clarity for the regulated community that can finally allow the private sector to invest in more efficient manufacturing in the US. I welcome any questions you may have regarding the discussion draft or on the Agency's efforts to improve the NSR program. Thank you.

Mr. SHIMKUS. The gentleman yields back the time and the chair thanks you and I'll now begin with the round of questioning with myself and I recognize myself 5 minutes for questioning.

Mr. Wehrum, aside from your current role as Assistant Administrator for Air at EPA, you have a lot of experience with the New Source Review program both as a regulatory lawyer and working for EPA in past administrations.

Given your experience, let me ask, from a big picture perspective, what is the role of the New Source Review in improving air quality?

Mr. WEHRUM. New Source Review program is one but only one of many tools that we have under the Clean Air Act to protect air quality.

The NSR is different than many of the other programs that we implement because, it doesn't apply to you just because you exist, as many of our ambient air quality programs or air toxic standards do.

It applies to you depending on what you do and that creates the real problems under the NSR program and as has been pointed—as I pointed out in my testimony and as several of the members here including yourself, Mr. Chairman, pointed out, because the applicability is based on what you do, then the program has an effect on decisions affected facilities make as to what projects they implement and which ones they don't, and in many cases I firmly believe—and I've been doing this for a long, long time now and I've seen it—that facilities choose not to implement common sense improvements to their facility that would improve efficiency, would improve productivity, in a lot of cases would improve environmental performance because those projects stand the possibility of triggering the NSR permitting program. So they just don't do them. That makes no sense whatsoever.

Mr. SHIMKUS. We are talking today about the New Source Review permitting reforms that make it easier for existing sources to carry out efficiency improvements and other measures that would provide environmental benefits.

Do you see the discussion draft reform approach as creating a large loophole that will lead to unhealthy emission increases?

Mr. WEHRUM. No, Mr. Chairman, not at all. I see the discussion draft as significantly improving the program and how it operates right now.

As I pointed out in my testimony, primarily what the discussion draft would do is align the applicability process under New Source Review with the applicability process under the new source performance standard program.

They are closely aligned. They are both programs that apply to new modified sources and, interestingly, they both rely on the very same statutory definition of modification and yet, for the past 30, 40 years the agency has used different definitions under the New Source Performance Standards program versus the New Source Review program to determine whether an emissions increase has occurred as a result of a project.

So the primary benefit of the discussion draft is it would align the programs, make them simpler to implement, and I think significantly improve their implementation.

Mr. SHIMKUS. The discussion draft's most significant policy change concerns a switch from the annual emissions projection test to an hourly emission rate test used under the New Source Performance Standards program to determine if a project will cause an emission increase.

Would you speak to the benefits of reforming the New Source Review program to use an hourly emissions rate test? You kind of already did mention it but can you restate that?

Mr. WEHRUM. Yes, Mr. Chairman. I certainly will.

I mentioned it in passing in my testimony, but the other significant problem with the New Source Review program is it's just confusing. It's very complicated. It's very confusing. It says something that, very sophisticated refinery operators, power plant operators, big companies that have a lot of resources on staff and available—have to hire people like me when I was in private practice to help them figure out how the program applies.

That speaks volumes. So, in addition to eliminating the barriers to common sense projects I described before, I think a real value of the discussion draft would be it simplifies the program and gets people like me, a lawyer in private practice, before I rejoined the EPA, out of the equation and lets people on the plant floor do this.

And I am sorry, I don't want to take up too much of your time, Mr. Chairman, but I started my career as a chemical engineer. I worked in chemical plants and I was responsible for implementing this permitting program.

And I can tell you it's impenetrable to somebody like that and that's part of why I went into law, part of why I came to EPA because fixing this program is a very high priority.

Mr. SHIMKUS. We are going to hear from two states in the second panel. Do you think this change will undermine states' efforts to ensure air quality?

Mr. WEHRUM. I do not, not one bit, Mr. Chairman.

Mr. SHIMKUS. And why?

Mr. WEHRUM. Because this is but one of many, many elements of the Clean Air Act and all of these elements work together in concert. They each serve a purpose and the totality of the Clean Air Act requirements is what should be measured and not the function of each individual piece.

So this is not going to result, in my judgment, in any significant reduction in the overall effectiveness of the act.

Mr. SHIMKUS. I thank the gentleman, and now I yield back my time.

The chair recognizes the gentleman from New York, Mr. Tonko, for 5 minutes.

Mr. TONKO. Thank you, Mr. Chair, and Administrator Wehrum, thank you again for being here today.

As I mentioned, many members have concerns about a number of EPA rulemakings, memos, and other regulatory actions that will have consequences for the Air Office. I particularly want to highlight the recently proposed strengthening transparency and regulatory science rulemaking, which will have significant impact on Clean Air Act regulations, including NAAQS. And a few days ago, the chair of the Science Advisory Board working group on EPA

planned actions for SAB consideration issued a memo recommending that this proposal merits further review by the board.

Obviously, you oversee a number of programs that rely on epidemiological studies and private health data so you are more than qualified to weigh in on this.

Do you believe the Science Advisory Board should have conducted a review of the proposal before it was published in the Federal Register?

Mr. WEHRUM. No, Mr. Ranking Member, I don't think that's necessary at all.

Mr. TONKO. Do you believe the Science Advisory Board should be asked to conduct the review now?

Mr. WEHRUM. Mr. Ranking Member, taking a step back, I think the overall concept and the goal of the transparency proposal is indisputable, which is to make sure that the science the agency relies upon is replicable and—

Mr. TONKO. I understand that, but do you believe the Science Advisory Board should be asked to conduct a review now?

Mr. WEHRUM. And Mr. Ranking Member, the—

Mr. TONKO. Yes or no.

Mr. WEHRUM. The importance of making sure—

Mr. TONKO. Yes or no, sir.

Mr. WEHRUM [continuing]. The science is replicable—well, it's important to put this in context, Mr. Ranking Member, because you're—it's a basic scientific principle that science that—studies that scientists create, part of science is the ability of other scientists to replicate their work and either confirm the findings that were made or possibly refute—

Mr. TONKO. Well, I am not hearing a yes that the advisory board should be asked to conduct a review now so I'll move on.

Do you believe the Office of Air and Radiation should have been involved in the review of the proposals through a formal intra agency review process before it was published?

Mr. WEHRUM. Yes, and in fact, we were. We had a copy of the draft before it was—

Mr. TONKO. Did—

Mr. WEHRUM [continuing]. Before it was proposed. We circulated it to our office directors and key staff and we had an opportunity to review and provide input.

Mr. TONKO. Was that among political appointees only?

Mr. WEHRUM. No. No.

Mr. TONKO. There were career staff involved?

Mr. WEHRUM. Yes.

Mr. TONKO. Would you share the Air Office's comments on the rule with this subcommittee and the committee?

Mr. WEHRUM. I don't know what form they take but I'd be happy to do that.

Mr. TONKO. Well, we'd ask that you share those comments with us, please. So that's a yes, you'll offer them?

Mr. WEHRUM. Yes, Mr. Ranking Member.

Mr. TONKO. The SAB working group's memo notes the proposed rule appears to have been developed without a public process for soliciting input from the scientific community.

A number of scientific organizations, state attorneys general, and members of Congress have called for an extension of the public comment period in order to more fully consider the impacts of the proposal. This is particularly important since the proposal sought comment on issues fundamentally related to its design.

Do you believe this proposal warrants an extended public comment period in public hearings similar to what has been done for other consequential rulemakings?

Mr. WEHRUM. Well, OAR is responsible for lots of things but this rulemaking is not one that's actually in my office and I believe Administrator Pruitt is prepared to speak to that question in the hearing that he's participating in as we speak.

Mr. TONKO. So would he support extended public comment periods and public hearings?

Mr. WEHRUM. I believe the administrator will speak to the issue and he'll speak for himself.

Mr. TONKO. Do you have a sense that he would want to see more comment period and more public hearings?

Mr. WEHRUM. Well, what I would say is we have nothing to hide, which is a bit redundant. This is all about transparency. So it's important.

I'll just speak for myself. The rulemaking process is enormously important. When we put out rules for public comment, that's a meaningful thing. It allows for us to get input and data and thoughts from affected folks and people who are knowledgeable on the issues. And so—

Mr. TONKO. Thank you.

Mr. WEHRUM [continuing]. I know the administrator shares those views.

Mr. TONKO. Thank you. Last week, Administrator Pruitt issued a memorandum on the NAAQS standard-setting process.

Moving forward, EPA intends to act the Clean Air Scientific Advisory Committee to address several issues, including any adverse public health, welfare, social, economic, or energy effects.

Did EPA consider soliciting feedback from the public SAB or the CASAC before this memo was released?

Mr. WEHRUM. We received input on a continuous basis in a variety of ways on how we do NAAQS reviews, on the NAAQS decisions that we make and the implementation decisions that we make. So—

Mr. TONKO. Would that include soliciting comments from the public?

Mr. WEHRUM. We always solicit comments from the public when we set NAAQS standards and do implementation rules.

Mr. TONKO. Mr. Chair, I yield back.

Mr. SHIMKUS. The gentleman's time has expired.

And Mr. Wehrum, can you pull your mic a little bit closer? I think—

Mr. WEHRUM. Yes.

Mr. SHIMKUS. OK. And the chair now recognizes the gentleman from Texas, Congressman Barton, for 5 minutes.

Mr. BARTON. Mr. Chairman, could I pass and let you go to some members who've been here while I—

Mr. SHIMKUS. That would be great.

The chair recognizes the gentleman from West Virginia, Mr. McKinley, for 5 minutes.

Mr. MCKINLEY. Thank you, Mr. Chairman, and thank you, Mr. Wehrum, for being here.

Mr. SHIMKUS. Come sit next to me. Get closer. It's OK.

Mr. MCKINLEY. Yes, I've heard that before.

[Laughter.]

And now they've already run off half a minute on me on this thing. Thank you. Thank you. Yes, there we go.

I want to focus—I know a lot of the discussion is going to be about some of the other matters on NSR but I want to stay as focused as I could on energy and the coal-fired power plants and gas-powered power plants.

And I am trying to reconcile the differences or the questions about the NSR versus—and grid reliability and ability of our electric grid, because we have had so many hearings about grid reliability, and over a dozen hearings we have had about grid reliability and the concerns we have, particularly when we hear from FERC—their comments about the concern of whether we are going to have enough power plants.

So as a result of this uncertainty that I am trying to reconcile the differences between the two, I see how that many of our power plants are just simply saying because of the uncertainty that you referred to and our chairman has referred to, are just prematurely shutting down the power plant because they don't want to go through the process of upgrading a facility that may not be used for 12 months and be faced with something that would cost hundreds of millions of dollars.

So they are concerned. I want to get to one issue here, if I could, just quickly with you. Would you agree that if a power plant replaced a part in maintenance with, essentially, the original part maybe 40 years ago, would it not be exempt from the NSR ruling if they are just going to replace in maintenance a part that was the original part that had just worn out?

Mr. WEHRUM. Congressman, there are a couple questions that would have to be asked and answered about that. One is would that project represent so-called routine maintenance and the very first part of the applicability process is if you're doing something—

Mr. MCKINLEY. I am just saying, Mr. Wehrum, it's a worn-out part that they are just—it's routine maintenance—we are going to replace that part.

Mr. WEHRUM. Right. So—

Mr. MCKINLEY. It may be a 40-year-old part.

Mr. WEHRUM. So what you described very well could be considered routine maintenance and that may be the beginning and the end of the applicability determination.

Mr. MCKINLEY. Thank you.

So I want people to understand that what we are saying if Tonko is correct that 25 percent of our power plants don't have fundamental SOCs and NO<sub>x</sub> air controls, here the plant now wants to do some work on their plant to do that.

They are going to go through a delay process that might be a year or more and the uncertainty that perhaps it might cost \$100



million to \$200 million dollars to do something when they just simply want to put in some new control devices.

So, again, I am trying to understand. If you don't improve your air quality, you don't follow the NSR, because if I am just doing routine maintenance, I am OK.

But if I try to improve the efficiency and the operation and the emissions of my plant, then I fall into something else.

Does that make sense to you?

Mr. WEHRUM. Absolutely not, and you put your finger on one of the two key problems as I see with the New Source Review, which is it very much stands as a barrier to the implementation of projects that are necessary to maintain facilities, improve efficiency and, as I said earlier, in many cases improve environmental performance.

And, as you pointed out, relatively minor projects in the grand scheme of the facility, an expansive view of NSR applicability could trigger the program and trigger the obligation to spend hundreds of millions of dollars on air pollution controls and as a result—I've seen it real live, first hand—companies decide not to go forward with those projects and they leave plants in a dilapidated condition and in a condition that's worse for the environment than it would be if they were able to continue to maintain it.

Mr. MCKINLEY. Not only worse, but doesn't it put us in a concern for reliability of the grid when we don't have these power plants available for implementation?

Mr. WEHRUM. Yes. So I think it's really important for EPA to stay in its lane. I am not a grid guy. I am an air guy, and I think part of the problem in the past with the EPA is it's tried to assume responsibility for things it's not responsible for.

So I am going to take off my AA hat and put on my engineer hat and my common sense guy and just say yes, grid reliability is enormously important and there is a real live debate going on right now about all the coal plant retirements which are resilient.

They have fuel onsite. They can operate for days and sometimes weeks without additional fuel delivery and that's very different than a natural gas-fired plant that if the pipeline delivery is disrupted for whatever reason there is no onsite storage and there is no generation.

So there is a real live debate going on right now about the issues that you raise. I am not the expert but I think it's important to run that to ground.

Mr. MCKINLEY. Perhaps on the next panel. I want to continue that line of reasoning, questioning. So thank you. I yield back.

Mr. SHIMKUS. Gentleman's time has expired.

The chair recognizes the gentleman from Texas, Mr. Green, for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman, and welcome to our subcommittee.

The New Source Review program has been an important program for protecting air quality in districts like I have. I have a very urban district in east Houston that—we have lots of industry in the district that brings in many high-paying jobs for our constituents.

But Houston also struggles with meeting attainment levels under the Clean Air Act and I am worried that some of the EPA's recent moves would threaten many of the gains we have made in recent years in improving the air quality in Houston.

Again, thank you for being here today. It's not always easy to get officials from our administration here to talk about legislation and I appreciate your involvement.

In 1995, the EPA created the "once in always in" policy for regulation of hazardous air pollution, or HAPs. Many of these HAPs, like benzene, are produced by numerous plants in our district. Only "once in always in" industrial facilities that were determined to be major sources of HAPs were required to employ strong pollution controls under the maximum achievable control technology measure, or MACT.

Under the previous policy, sources must apply MACT if they are emitting more than 10 tons per year for a single hazardous chemical or 25 tons per year for combined hazardous chemicals. And your January 25th guidance changed this policy now for major sources to be classified as area sources under the Clean Air Act if they were below this threshold.

While I understand that many facilities have done a great job of reducing their emissions through upgrades and would not now fall under the major source classification when "once in always in" was created in the tonnage decision or was based on defining a major source not on what level of emissions were necessarily safe.

Under the new policy, our district will see as much as 200 more tons a year in emissions. Has the EPA done any of the new studies on what a safe level of emission is for the HAPs that prompted this decision?

Mr. WEHRUM. Well, thank you for your question, Mr. Congressman. There is a lot packed into what you just said.

Mr. GREEN. I know. Well—

Mr. WEHRUM. So let me just—

Mr. GREEN [continuing]. We all represent our districts.

Mr. WEHRUM. Oh, absolutely. So let me take a shot and you can tell me if I get to the point that you want.

So the "once in always in" policy is a very important policy. We issued the memo that we did because, like the NSR program, we think that policy stood in the way of people doing common sense things to reduce emissions.

So, for instance, prior to issuance of the policy, there was absolutely no incentive for any industrial facility to reduce emissions to lower the major source thresholds because, it's nothing but additional cost and expense for them and produces nothing in the way of regulatory benefit.

So under the "once in always in" policy, if they take voluntary measures to reduce emissions further than the law requires and they take limits to below major source thresholds, then we will see emissions reductions and they see real regulatory relief and it's a win-win situation.

Now, there are those who say look at—so what I just offered is the glass half full perspective, which I think is absolutely right. But there is a glass half empty perspective and there are those who say, oh no, there is going to be huge emissions increases associated

with these people who are going to shuck off the standards that apply to them and then intentionally increase emissions all the way up to just under the major source thresholds.

The studies that purport to show that are just shoddy, and I'll tell you, if we try to rely on those kind of studies in a rulemaking, we'd get laughed out of court.

Mr. GREEN. Well, I only have a very short time. Has the EPA done any new studies on what a safe level of emissions for these HAPs that prompted the decision? Has the EPA done that study?

Mr. WEHRUM. Part and parcel of this toxics program that the policy applies to is a two-step program. Step one says we have to apply technology standards and step two says we have to follow up after a period of years with a risk assessment to make sure that there is no unacceptable remaining risk. So we are——

Mr. GREEN. OK. The emissions from HAPs from these facilities are they classified as area sources considered a safe level, that you know of?

Mr. WEHRUM. I am sorry, Mr. Congressman. I don't understand the question.

Mr. GREEN. OK. Well, you can get back.

Have you done any estimates on the potential increase in emissions that this guidance will allow that——

Mr. WEHRUM. Yes. We took a very hard look and, as was pointed out earlier in this hearing, in my prior tenure at EPA during the Bush administration this is an issue we talked about and actually proposed a rule to make a change in the regulations to accomplish what we did in the memo just a couple months ago.

And so we have abundant public comments that were received when that rule was proposed and we have taken a hard look at those public comments.

There, honestly, is no way to comprehensively analyze because of the broad, broad applicability of these programs. But what we have done is looked at very targeted sectors based on comments that we have received and what we have seen is a preponderance of information indicating that we think ultimately this policy is going to produce emissions reductions and is not going to result in the hypothetical increases that many people are worried about.

Mr. SHIMKUS. The gentleman's time has expired.

Mr. GREEN. Mr. Chairman, I'll submit the rest of the questions. Thank you.

Mr. SHIMKUS. And the chair now recognizes the gentleman from Texas, Mr. Barton, for 5 minutes.

Mr. BARTON. Thank you. Thank you, Mr. Chairman.

Thank you, sir, for testifying. This is a very complicated issue. The average person doesn't understand the difference between a New Source Review or whatever else we are talking about here. But it's an important issue. So I am going to ask some questions, and I am not sure I understand myself what I am asking. But, hopefully, you will.

Under current law, if an hourly emission per unit of output stays the same or goes down, is it possible to have an annual increase in emissions? So you change your process. You have equal or less emissions.

But on this annual standard, would it be possible in such a case for the annual standard to be violated? I would think the answer would be no.

Mr. WEHRUM. Well, it is theoretically possible to not have an increase in hourly emissions but to have an increase in annual emissions. So that's theoretically possible.

Mr. BARTON. It is.

Mr. WEHRUM. And one of the primary criticisms of the discussion draft is that it may allow that to—you may not see a short term—the hourly measured short-term emissions. You may not see a short-term increase in emissions.

But there is a hypothetical possibility to see a long-term in annual emissions.

Mr. BARTON. I would think it's not possible unless you increase the output.

Mr. WEHRUM. That's exactly right. Mr. Congressman, that is exactly right. You put your finger on it, and I think it's important to point out, and this must be kept in mind as work on the discussion draft goes forward, this is only one of many, many tools we have in the Clean Air Act toolbox.

So I have said hypothetical possibility and I use that word intentionally because I believe it is just hypothetical and so let's just talk about power plants, and this program applies to way more than just power plants.

So just look at power plants. There is the acid rain program. There are interstate transport requirements that apply. There are, in some cases, nonattainment requirements that apply. There are state-level requirements that apply. There are air toxic standards that apply. There is a plethora of emissions limitations that apply to these standards.

So is it hypothetically possible you'll see an emissions increase with an hourly emissions test? Yes. But in reality, you can see that—

Mr. BARTON. Let's—

Mr. WEHRUM [continuing]. But it's hard to see because we are not operating in a vacuum. We are operating in a heavily, heavily regulated—

Mr. BARTON. Let's use a real-world example. ERCOT, down in Texas, is predicting that there could be—there is a possibility of rolling power outages this summer in Texas because the maximum generation for electricity, if you had the worst case scenario—105 in Houston, 105 in Dallas, 105 in Austin—I mean, just a hellacious hot summer all over the state—that we might not have the ability to handle that.

So we try to get existing plants to generate electricity to expand so they can generate more electricity. OK. But their emission per unit of output, since they are going to use newer technology, you get more output than the old technology. But the overall emissions are going to go up because they are going to generate a lot more electricity. Would that trigger a New Source Review under existing law?

You've got a potential shortage. You're trying to plan for that. You don't have time to build a brand new power plant so you're going to expand an existing one but use new technology.

You get more output for the same level of emissions but the overall level of emissions will go up because you're going to generate 25 or 30 percent more output. So that would trigger a New Source Review?

Mr. WEHRUM. It could.

Mr. BARTON. Under new—

Mr. WEHRUM. Under current law, and one of the real benefits of the discussion draft is it would allow for the use of a so-called output-based measure of emissions increases.

And so it would solve the problem you just described because it would recognize that in the situation you described we all want plants to run more and be more efficient because that is better for the environment.

Mr. BARTON. So my time is about to go out.

Does the Trump administration support the discussion draft as it's currently drafted?

Mr. WEHRUM. The administration has not taken a position on the draft but, in my capacity—as I said, in my testimony, I strongly support what you're—

Mr. BARTON. You would recommend my support?

Mr. WEHRUM. Yes, Mr. Congressman.

Mr. BARTON. Thank you, Mr. Chair.

Mr. SHIMKUS. The gentleman's time has expired.

The chair now recognizes the gentlelady from Michigan, Mrs. Dingell, for 5 minutes.

Mrs. DINGELL. Thank you, Mr. Chairman.

Chairman, I've got a number of questions for you today on ongoing policy changes at the EPA. I am going build on what my colleague, Mr. Green, was asking you.

But I care very deeply about one of the activities that you were doing and that is the mid-cycle review on the fuel economy standards.

First, given recent press reports, I thought there was a good meeting at the White House on Friday. But yesterday afternoon's Post made me think that that was not the case.

Mr. Wehrum, I understand that Administrator Pruitt sat down with the President and a number of the CEO automakers last Friday to discuss automotive fuel economy and GHG emission standards.

In that meeting, I understand the President directed Administrator Pruitt and Transportation Secretary Chao to reach out and negotiate a possible deal with California to ensure that we have one national program in this country for fuel economy and that GHG standards are maintained.

I was happy to hear that. That's what the autos say that they need. California has said that they will work with everybody. But I am concerned that yesterday I heard that that was not the case—that you were not going to work with California, signaling the exact opposite of what we heard on Friday.

It's troubling, because the auto industry needs stability. They need to know where they are going. Can you tell me what EPA is doing on this, please?

Mr. WEHRUM. Yes, Mrs. Congresswoman.

I wasn't in the meeting with the President so I can't speak to what was said or what was not said. Like you and like everyone else, I got no reports about it. So I am not going to do a he said, she said about that.

But I can tell you we are working very hard on a proposed rule. You know the administrator issued the determination not long ago saying he thinks a change needs to be made to the current standards in the 2021 and 2025 time frame, and we are hard at work on that in conjunction with NHTSA on a proposed rule that would suggest some possible changes based on the administrator's findings and Secretary Chao's similar concerns.

Mrs. DINGELL. But does EPA understand the importance to the auto industry of one national standard and that the importance of what was originally negotiated was having all players at one table and that if you care about jobs having two sets of standards so that they are producing one car for 14 states and another is not going to give the companies the certainty they need?

Mr. WEHRUM. I'll speak for myself and say absolutely. I understand the importance of that and what I would say is it's a priority of my office and I believe a priority of the administration to try to maintain one national program. And so I think to the degree the press reports are saying that's not a goal I would say that's wrong. But what I would say is we think changes need to be made and we have started a dialogue with the state of California. I've personally been involved in those conversations.

We plan to continue that dialogue consistent with what the President said in last week's meeting and, in fact, as we speak are trying to set up the next discussion with our colleagues at CARB for Wednesday. They are going to be here this week for meetings and we are hoping to get together with them while they are here in town. So we have the dialogue underway. We intend to continue that dialogue and if we can find a way to maintain one national program we certainly want to do that. I know California wants to do it. I know the OEMs want to do it and we are going to try.

Mrs. DINGELL. I find that reassuring. I would love your personal commitment to keep trying to make that happen because we all care about the health of the auto industry.

Mr. WEHRUM. We are going to keep trying.

Mrs. DINGELL. Let me go quickly, because I am going to run out of time, and build on what my colleague, Mr. Green, was asking about in "once in always in."

When Administrator Pruitt testified at a Senate Oversight hearing, he said that the decision to end "once in always in" policy was made outside of your office.

Is that accurate? Was the decision to rescind the "once in always in" policy made outside of your office? What was your role, if any, in the decision to rescind this policy?

Mr. WEHRUM. Well, I signed the memo. But anything I do is based on the authority of the administrator.

So I can tell you that he was highly involved in the vetting. He was highly involved in setting the policy and I ultimately issued the memo. But it's a reflection of the agency's position.

Mrs. DINGELL. So I've got 25 seconds left and I'll probably ask you to do more of this for the record. But you were talking that you

studied the issue but we haven't seen anything and we need to have more transparency about what the impact was going to be about when it was conducted, is it publicly available.

We have got the Union of Concerned Scientists saying that there'll be an additional 155 tons of hazardous air pollutants per year. Can we make that data available that you've analyzed?

Mr. WEHRUM. Well, an important part of what we said when the memo came out is we intend to follow up the memo with the rule-making so we can lock in our new policy as actually part of the codified regulations.

So that will be an opportunity for everyone with an interest to look at our assessment, to look at our analysis, and to give us their comments as to whether they think it's right or not.

Mrs. DINGELL. Thank you.

Mr. SHIMKUS. Gentlelady's time has expired.

The chair recognizes the gentleman from Ohio, Mr. Johnson, for 5 minutes.

Mr. JOHNSON OF OHIO. Thank you, Mr. Chairman, and I'd like to start out by thanking you and Representative Griffith for your work on this really important bill and for holding this legislative hearing today. I am also appreciative of the EPA's work to date to inject some certainty and common sense into NSR permitting.

It's now incumbent on Congress to further that certainty through advancing this discussion draft. As Mr. Johnson, with America's Electric Cooperatives, who will testify in the second panel, explains in his testimony, innovative technologies and systems to improve facilities are being left on the shelf because of current NSR processes, essentially undermining the goals and intent of the Clean Air Act. I think everyone here can agree that's an issue. The discussion draft we are looking at and discussing today will rectify that issue while addressing much-needed other reforms and I am supportive of these efforts.

So, Mr. Wehrum, seeing that there is only one definition for the term modification in the Clean Air Act, why has the EPA interpreted this definition differently for the NSR program than it did for the NSPS program?

Mr. WEHRUM. That's hard to answer, Mr. Congressman. That decision was made a long, long time ago. The NSR program was first put in place just by regulation in the mid-70s and then followed up with a revised program after the law was changed in 1977.

But the fact is there has been a differently regulatory definition for a long, long time now and the idea of creating consistency between the two programs makes perfect sense.

As I said earlier, there is a lot of overlap between the two programs. They are intended to accomplish a lot of same thing and creating that kind of consistency would improve understandability and implementation.

Mr. JOHNSON OF OHIO. Well, it seems to me that if Congress wanted the definition to be different it would have provided a separate definition for each program. That's the way I look at it.

Mr. WEHRUM. That seems logical, Mr. Congressman.

Mr. JOHNSON OF OHIO. OK. Thank you.

State regulators and the EPA both play an important role in administering the NSR permitting program. In what ways are you

seeking to improve this Federal-State interaction related to the NSR program?

Mr. WEHRUM. Well, you're right. The Clean Air Act, in many respects, is an exercise in cooperative federalism. We, at the Federal Government level, have a lot of responsibility.

But Congress intended states to take a lot of responsibility themselves and, in fact right at the beginning of the Clean Air Act it says air pollution control at its source is the responsibility of the states under the Clean Air Act.

So Administrator Pruitt takes that very seriously. I take that very seriously. Part of our concern with the program is it has been too Federal heavy, as a lot of what we do has been Federal heavy.

And so in addition to improving the Federal program. Our intention is to make sure the states understand they have flexibility in what they do and how they do it under the NSR program.

The things we do we think make good sense and would be real improvements and we hope states pick up those ideas. But if they have other ideas they want to implement we are going to be flexible because we should be flexible. That's how the law was intended to be implemented.

Mr. JOHNSON OF OHIO. Well, while it's not perfect I certainly applaud the efforts of the EPA to engage the states across the spectrum in policy making because I agree with you—I think that's important.

Can you talk about the role of the policy office and enforcement offices at the EPA? Specifically, should the policy office or the enforcement office determine what defines a modification under NSR?

Mr. WEHRUM. As I like to say, they is us. I mean, the EPA is an entity and the EPA is part of a larger entity, which is the executive.

So, as things currently stand, the responsibility of rulemaking sits with my office. But a responsibility for interpretation and implementation, in some cases, including NSR, sits in the enforcement office.

So that was done intentionally during the Clinton administration for reasons but for a lot of reasons that doesn't make a lot of sense and, we have had a conversation in the way as to whether those delegations should be reassigned because a lot of people think and, frankly, I believe that people who write the rules should be the people who interpret the rules.

Mr. JOHNSON OF OHIO. In the last 30 seconds I've got, what are you doing to ensure that there is clear up-front guidance, which will reduce uncertainty about future enforcement penalties?

Mr. WEHRUM. Oh, boy. Well, I said earlier I need to stay in my lane. So enforcement penalties is not in my lane. That's a question that's best asked to the enforcement office assistant administrator.

Mr. JOHNSON OF OHIO. OK. All right.

Mr. Chairman, I yield back.

Mr. SHIMKUS. Gentleman yields back his time.

The Chair recognizes the gentleman from California, Mr. Peters, for 5 minutes.

Mr. PETERS. Thank you, Mr. Chairman. Thank you, sir, for being here.



As you well know, in 2011 the EPA entered into an agreement to settle a lawsuit brought by states and environmental groups in which EPA agreed to set standards for GHG emissions from new and existing fossil fuel-powered fired power plants under Section 111 of the Clean Air Act.

The Supreme Court ruled that EPA must regulate greenhouse gases if EPA finds that they endanger the health and welfare of current and future generations.

Following the Supreme Court's decision, EPA issued what is known as an endangerment finding. That finding requires the EPA to take regulatory action under the Clean Air Act to curb emissions of carbon dioxide, methane, and four other heat-trapping air pollutants from vehicles, power plants, and other industries.

That ruling allows the EPA to regulate greenhouse gases as air pollutants covered by the Clean Air Act.

This led to the clean power plan and essentially the endangerment finding gave EPA its mandate to regulate fuel economy standards for vehicles, permitting requirements for new construction, or the GHG regulation of vehicles and new stationary sources.

So now that you're on the job, I wanted to ask you specifically do you believe that greenhouse gas emissions endanger the public health?

Mr. WEHRUM. Well, as I said in my confirmation hearing, there is a progression you need to go through to kind of get to where you are and one question is, is the climate changing and I think the answer is, clearly, yes.

The second question is do manmade emissions contribute to that and I think the answer is, clearly, yes.

The third question is, how much do manmade emissions contribute to that, and what I said in my confirmation hearing and what I continue to believe is I am not sure.

And what I said then was, for the last 10 years before coming here I was an attorney in private practice and nobody ever hired me to go dive into the mountain of data that exists on climate and so there is a lot I had to learn and that's what I said 6 months ago.

Mr. PETERS. So right now, you have no opinion on whether greenhouse gas is a danger to the public health?

Mr. WEHRUM. Well, where I was going was I said I have a lot to learn and, I am putting my money where my mouth is and the climate protection division is, one of the divisions within my office and what I asked them, beginning a few months ago is to do a series of briefings on the state of climate science to help me better understand, what science is out there—

Mr. PETERS. Have you taken those briefings yet?

Mr. WEHRUM. We are in the process. I've done several and we have more to go. There is a mountain. There is a lot out there and—

Mr. PETERS. Has the staff indicated that they've changed their conclusions about this at all?

Mr. WEHRUM. Well, all decisions like that flow from the administrator. So that wasn't a staff decision. That was a decision by the administrator at the time.

Mr. PETERS. Has the administrator expressed to you whether he has an opinion on whether greenhouse gases endanger the public health?

Mr. WEHRUM. He has a process concern, at a minimum. His concern is the endangerment finding you describe was made without consideration of alternative views.

Mr. PETERS. I want to get to that in a minute. But I am asking his particular opinion on whether—

Mr. WEHRUM. Well—

Mr. PETERS [continuing]. What's the opinion of the administrator of whether greenhouse gases endanger the public health? Has he expressed that to you?

Mr. WEHRUM. Well, I am not going to speak for the administrator. But, again, to complete the thought, he's very concerned about process and believes—the way he talks about I think is the way to talk about it is, people with a different view haven't had a voice so far in this process and he's been trying to find a way to allow them to have some voice and—

Mr. PETERS. What's the schedule for that process? Do you know what his process is going to be?

Mr. WEHRUM. Well, there is no process in place and there is no schedule right now. So we have talked about it but we are not—

Mr. PETERS. Is it your intention or do you understand it to be the administrator to revisit the endangerment finding with respect to the greenhouse gases?

Mr. WEHRUM. We don't have any plans right now. As I said, we have talked a lot about the integrity of the process that led to that determination and so far we are focused on process and integrity and we haven't talked about outcome.

Mr. PETERS. I am totally willing to accept your answer except there is no process either. There is no answer on whether the administration believes that greenhouse gases pose a threat to human health and the environment.

There is no answer. I don't get it from the administrator. I don't get it from you. Apparently, you haven't gotten it yet from your staff. And then everyone talks about a process, but there is no process either. There is no process for these voiceless oil and gas companies to get their voices heard.

I am uncomfortable staying where we are but I am suspicious that that's not where you want to be.

Mr. WEHRUM. Well, what I would say is it's important to look at the broader context. Well, what I mean by that is Congresswoman Dingell asked me a question a second ago about car and truck standards that exist at least from an EPA standpoint because of greenhouse gas emissions.

And my answer was we will work on a proposed rule to maybe change those standards. I didn't say we are working on a proposed rule to eliminate those standards and we are not going to do that.

Mr. PETERS. Just to conclude, there is no action right now to revisit the endangerment finding pursuant to greenhouse gas. Is that correct?

Mr. WEHRUM. That's correct.

Mr. PETERS. Thank you. I yield back.

Mr. SHIMKUS. The gentleman yields back his time.

The Chair recognizes the gentleman from Texas, Mr. Olson, for 5 minutes.

Mr. OLSON. I thank the Chair, and welcome, Mr. Wehrum.

As you know, many projects we see being undertaken at large sites are designed to improve emissions. One of the best examples is from home, Texas 22.

It's called the Petra Nova Project. That's a power plant owned by NRG. They have four coal generators and four natural gas generators.

On their own, they had a goal to reduce greenhouse gas emissions. Their solution was to capture carbon emissions from the coal production and use the captured CO<sub>2</sub> to increase oil production.

Their capture right now the equivalent of 350,000 emissions daily from automobiles—a big amount of carbon captured by this one power plant.

Its NRG—the capture system was designed by JX Nippon and the oil companies, Hilcorp, that has an old oil field that's about 75 miles southwest with a pipeline in existence that would get rid of that.

I invite you to come down there, all my colleagues, to see what's working. It's the only one in the whole world that's actually viable for carbon capture.

But that's unique. Can you talk about some of the other types of large-scale projects like Petra Nova that you have seen that make our air cleaner and what are you doing to clear the pathway for those guys to get through this bureaucracy and help us make our air cleaner?

Mr. WEHRUM. Mr. Chairman, I am not aware of any other ongoing projects like Petra Nova. I think it's a very unique facility—at least in the United States. I think there are some internationally.

But I think enormous strides continue to be made in controlling air emissions generally and CO<sub>2</sub> emissions, more specifically. So that's a very unique technology doing a very unique thing. But when you set that aside and look at—just thinking about the world of power generation, tremendous progress has been made and continues to be made.

And we have talked a little bit about the shift away from coal power into natural gas-fired and that's happening for a variety of reasons. But as a result of that alone there have been substantial reductions in emissions from the power sector nationwide over the past few years.

So I think substantial progress has been made. Substantial progress will continue to be made and our job as an agency is to be smart about how we implement our program so that we accomplish good results but don't accomplish adverse results at the same time.

Mr. OLSON. Again, Petra Nova is just one example of what we can do with our technology right now.

My question is are there other projects out there, big ones, that you're looking at that you can help them get through this bureaucracy, get that project online and make our air cleaner, like Petra Nova? Doing anything else out there in the country as a model that you're working on?

Mr. WEHRUM. And, again, the Petra Nova technology is very, very specific. But the answer to your broader question is on a daily basis we work with individual facilities who come to us seeking help and understanding how to interpret and apply our regulations.

So we do applicability determinations. We do interpretive memos of the sort that we have been talking about. So we put a tremendous amount of time and effort into helping affected facilities, understand how the program applies and help them navigate or, as you said, navigate the complex programs that do apply.

Mr. OLSON. Thank you.

Final question—you commented that the New Source Review process can be very complex and time consuming. It hurts my brain, it's so time consuming.

Can you talk about why reducing complexity does not mean necessarily improving air quality? If we have reduced complexity, can we have reduced air quality? Or is it direct tie? How does it work? No complexity—have to get more complex or can we do less complexity cleaner air?

Mr. WEHRUM. Oh, I think we can have it all. You bet.

Mr. OLSON. There we go. I've got 52 seconds—a colleague want my time?

Mr. SHIMKUS. Yield back.

Mr. OLSON. The chair will yield back.

Mr. SHIMKUS. The gentleman yields back the time.

The Chair recognizes the other gentleman from Texas, Mr. Flores, for 5 minutes.

Mr. FLORES. Thank you, Mr. Chair, and I appreciate the witness for being here today.

We talked through several of the concerns about the NSR program this morning and one of the ones we haven't talked about is the penalties for lack of compliance.

And it's my understanding that by statute the EPA may impose fines of more than \$95,000 per day for Clean Air Act violations. Is that correct?

Mr. WEHRUM. I believe that's true.

Mr. FLORES. OK. So if the EPA believes that a facility should have gone through an NSR for a change at the facility it could threaten to fine that facility \$95,000 for every day that the facility operated since that change was made? Is that also correct?

Mr. WEHRUM. That's correct, Congressman.

Mr. FLORES. OK. So in this case, just hypothetically, if the EPA identifies a change more than 3 years after the fact, this could involve fines of more than \$100 million.

Would you agree that this type of penalty and the uncertainty driven by the penalty serves as a disincentive for companies to carry out efficiency improvements?

Mr. WEHRUM. Well, Mr. Congressman, let me take a step back.

Mr. FLORES. Sure.

Mr. WEHRUM. I've said a couple times in this hearing it's really important for me to stay in my lane and I am responsible for program development and implementation but not for enforcement.

So I have personal views on the questions you're asking but I think from an institutional standpoint they are best directed to the assistant administrator for the enforcement.

Mr. FLORES. But if you put yourself into the shoes of a company that's trying to improve their efficiency and they make a determination that they didn't need to do an NSR because they are trying to improve efficiency and to reduce their emissions, but then the EPA comes in after the fact and says, oh, here's a \$100 million penalty, then the folks making the decision about whether or not to invest may elect to not invest at all because of the uncertainty regarding the fines that could happen to them.

Mr. WEHRUM. Mr. Congressman, so notwithstanding what I just said—

Mr. FLORES. I understand.

Mr. WEHRUM [continuing]. The point you're raising is, is there significant liability associated with possible violations with New Source Review, the answer is absolutely yes.

You've been focusing in penalties, but penalties are one piece of the overall picture if there is an enforcement action. They can add up, as you say, over a period of years to a big number. But often the bigger number in the enforcement cases is the injunctive relief, which is the order to install air pollution controls and take other mitigation measures.

So all of that together can turn into a very big number for a typical power plant, and your point is do affected facilities think about that as they are making decisions about how to implement projects and the risks that may come with that, and the answer is absolutely, positively, yes.

Mr. FLORES. Right. And that sort of leads to the next question is does it make sense that a company making a small investment or a change in an existing facility should be required by the NSR program to spend hundreds of millions of dollars on new state of the art pollution control equipment if they were just trying to improve efficiency, reduce emissions already.

Mr. WEHRUM. Right. And that doesn't make sense at all.

Mr. FLORES. OK. Also, some equipment manufacturers report that there is little demand for energy efficiency products that they are selling because companies are unwilling to retrofit old equipment with newer technologies due to the concern about triggering an NSR.

This is the whole purpose of the hearing and that is how can we reform the NSR program so that companies certainly won't be penalized for doing activities that actually reduce pollution.

And that gets us into the discussion draft and I think you've said that you support the direction we are going in the discussion draft.

Mr. WEHRUM. Yes, Mr. Congressman. I think it would mark real improvement.

Mr. FLORES. OK. Thank you. I yield back.

Mr. SHIMKUS. Gentleman yields back the time.

The chair now recognizes the gentleman from Georgia, Mr. Carter, for 5 minutes.

Mr. CARTER. Thank you, Mr. Chairman.

Thank you, Mr. Wehrum, for being here. I appreciate you being here.

I wanted to change our focus. I know we are here to talk about NSR but there is the subject that is very important to me that I brought up in a number of meetings with Secretary Pruitt that I'd like to ask you about.

And that is about marine engine waivers for pilot boats. That's something that's very important. I have two major seaports in my district. They are struggling with this issue.

I brought it up, as I said, to EPA staff and to Secretary Pruitt when he's been before our committee. Not only do I want to change the subject but I want to change the tone because I want to say thank you. You've responded, and I would ask that you convey my thanks to Secretary Pruitt as well.

He committed, last time he was here, that he would personally look into this, and he did, and I want to thank you for that. And my confidence has been restored and I appreciate it very much, so kudos to EPA for this.

I want to ask you, because what happened is that three staff members were sent out to one of the engine manufacturers to look at this and to study in and see what a problem it was and, particularly, for the high-speed commercial vessels between 45 and 80 feet, which is what we use in the Savannah Harbor and what is very important to us.

And we feel like we are the tip of the spear here because we are kind of the first ones that have had to deal with this. So we are trying to get it resolved as quickly as we can and it's very important because if we don't have those pilot boats out there, business stops and commerce is business for us down there.

And I wanted to ask you, the staff that visited the boat manufacturer indicated that they were going to be putting together a report.

Have they come back with any initial findings yet or any feedback that you might be able to share with us?

Mr. WEHRUM. They have not, but they were just out there last Thursday. So they haven't had much time to—

Mr. CARTER. I understand. I hate to be impatient but they are bearing down on me and this has, in all honesty, been going on a while—because we have heard that it may take up to 2 years and that is simply not acceptable. That's just not going to work.

Mr. WEHRUM. Well, we are moving expeditiously, Congressman. I've talked with my staff on a number of occasions about this issue. I understand exactly what's going on.

Mr. CARTER. Thank you.

Mr. WEHRUM. It was important for our folks to get some boots on the ground out at the engine manufacturers. So we were happy to have that opportunity and we plan to press forward as quickly as we can.

And, I think as you know, it may not be a few weeks kind of thing. It may be a few months kind of thing just because we may have to revise our rules to accommodate what's going on.

Mr. CARTER. Well, let me ask you this.

Mr. WEHRUM. May was the key word there—

Mr. CARTER. OK. I understand.

Do you not normally put waivers in your rules like that with anticipation that there will be exceptions to those rules?

Mr. WEHRUM. We do sometimes. But usually when we know there is an issue to be resolved. This was something we didn't see coming. So there is nothing in the rule that says, there is a way to—well, there may not—again, may is the key word.

Mr. CARTER. I understand.

Mr. WEHRUM. We are trying to find a way.

Mr. CARTER. Well, two more things real quick. First of all, I would just ask your commitment to keep this on the front burner and to please go back and if you can provide my staff with any information we would certainly appreciate it.

Mr. WEHRUM. Absolutely.

Mr. CARTER. And secondly, if you see any other regulatory hurdles that we are going to have to overcome if you'll please let us know about those as well.

Mr. WEHRUM. Will do.

Mr. CARTER. And then, finally—and I'll yield after this—again, please convey my sincere thanks to the secretary for acting on this and fulfilling his commitment.

Mr. WEHRUM. We will do that.

Mr. CARTER. Thank you, and I yield back, Mr. Chair.

Mr. SHIMKUS. Gentleman yields back his time.

The chair recognizes the gentleman from South Carolina, Mr. Duncan, for 5 minutes.

Mr. DUNCAN. Thank you, Mr. Chairman.

I want to begin by saying that I am supportive of Mr. Griffith's efforts to improve and reform the NSR permitting program.

In my opinion, the NSR program in its current form seems like a counterproductive policy that disincentivizes companies from pursuing projects that would increase efficiency and mitigate environmental pollution.

And I would say that frustration with the American people and federal bureaucracies and the speed of permitting, whether it's this or whether it's getting a Class III license with ATF, it permeates the whole government the frustration of the American people.

They expect our government to be more efficient and I think that's what the purpose of Mr. Griffith's efforts are—to make government and at least the EPA and its permitting process a little more efficient.

So I agree with your remarks, Administrator Wehrum, that we need to simplify the program and provide clarity to companies regulated by this.

I want to talk about some of the confusion on how much construction companies are allowed to do prior to obtaining an NSR permit. I do not believe that this is addressed in the discussion draft.

Can you speak to this a little bit? What can construction companies do prior to getting approval?

Mr. WEHRUM. This is another example of why the NSR program drives people crazy. So it's a preconstruction permit program, which means you need to have the permit in hand before you begin constructing the permitted activity.

So that sounds simple but it's complicated in practice because what is the permitted facility? You go out and pour a foundation—is that part of the facility? You go out and if you build roads, secu-

rity gates, is that part of the permitted facility? You go out—if you're building a boiler, wouldn't you buy the boiler and put it in place? So a judgement has to be made as to what point in the physical construction process is the point that marks the beginning of the regulatory process.

The EPA has spoken to that many times in the past but it's a subjective thing, not an objective and there is no bright line here and EPA has made several case-specific determinations.

I said in my opening remarks and in my written testimony, we have begun what I believe to be an aggressive process of identifying problems with rules and opportunities for improvement in the rules and the issue that you've raised is one of those things that's on our radar right now.

What we want to do is encourage investment in facilities, allow for projects to go forward in anticipation of getting the permits that are necessary.

So the permits shouldn't stand as an unnecessary obstacle to common sense activity. And I think we could put a finer point on this issue and it's something that we intend to do, going forward.

Mr. DUNCAN. And I appreciate that. Let me ask, how much technology is used? I applied for a big game permit for my son online. Got a notification we got accepted. I can dial up a buoy in the Charleston Harbor and find out what the weather conditions are.

Is the agency using the technology to find out what the air quality emissions are at a plant in Easley, South Carolina, and whether they are in attainment or not, or a construction project that may be expanding an operation there, looking at current air quality and I guess the whole application process online with feedback from the agency.

How are you guys using technology and what can you do better?

Mr. WEHRUM. We are trying very hard to keep up. Technology and the air quality monitoring and information management areas is growing by leaps and bounds. So substantial improvement is being—

Mr. DUNCAN. Are all these monitors transmitting to Washington or wherever the field office is our is somebody having to drive their pickup truck out there and pull that data?

Mr. WEHRUM. A little bit of both. A little bit of both.

Mr. DUNCAN. Little bit of both?

Mr. WEHRUM. Yes. So, the answer to your question is we have room for improvement and we are trying—I have a whole office down in North Carolina that's focused on emissions measurement technology and I can tell you this is very much a focus of ours.

Mr. DUNCAN. What do you need from Congress to help make that happen? To help make the technology into the 21st century?

Mr. WEHRUM. I don't think there are barriers under the law for us right now. I think what we need to do just as an institution is be smart about using our resources and be smart about keeping up with the technologies and we are committed to doing that.

Mr. DUNCAN. OK.

Mr. Chairman, I don't have anything further. I yield back.

Mr. SHIMKUS. The gentleman yields back his time. The chair now recognizes the gentleman from Virginia, Mr. Griffith, who's been patiently waiting, for 5 minutes.



Mr. GRIFFITH. Thank you very much, Mr. Chairman. I greatly appreciate it and I want to thank you, the E and C staff and everyone who has helped get this bill to this critical point in the process and I do appreciate it.

And I appreciate you, Administrator Wehrum, for being here as well today. The current EPA has made New Source Review reform a priority. I share this priority and appreciate your comments on my legislation today.

I've heard from folks in my district as well as industries here and in the previous hearing how complicated and burdensome this program is and it was singled out multiple times in the Department of Commerce's report on regulatory burdens for domestic manufacturing.

That being said, I have a story in my own district which I think brings home the need for this reform. It doesn't cause a lot of pollution nor any pollution at all. What we have is a manufacturer of furniture, and when touring that manufacturer of furniture who was—it was Vaughan-Bassett Company that was the subject of "Factory Man," the fight of John Bassett to keep American furniture going when it looked like China and the Asians were going to chase us out of the marketplace and he did a great job.

But I am touring his factory and there is a conveyor belt that runs down and runs back and there is nothing out there, and they built ramps to get back over it again on the other side. And I said to him at the time, 5 or 6 years ago when I was first touring, and I said, "What's this here for?" "Oh, we got some regulation. If we change it, we have to redo everything. So we have this conveyor belt that goes out to nowhere and comes back. And it's not efficient, but we don't want to deal with it."

In checking to make sure it was New Source Review before I came to this hearing, we checked on this last week. They had to check with their regulatory guy who handles all this because they are not really sure. They just know they can't touch it. Goes to nowhere. Adds time to the production of the pieces of furniture. They don't use what the original purpose was but they have to keep the conveyor belt going. That affects their factory, and let me detail from the book how I know it affects their factory.

So he's getting heavy competition from the Chinese and he's going to have to do something about it. He's taken apart one of the pieces they are doing to see what they are doing more efficiently than what he's doing in his factory, and it states in this book by Beth Macy, "In his sweat-stained golf hat, John Bassett stood atop a conveyor belt and told his workers he had no intention of closing the factory. Bassett asked his workers to not only work faster but also suggest ideas for factory floor improvements. What he didn't want to hear, what he never wants to hear, was the phrase, 'It can't be done.' If something was wrong with a machine and it was slowing production down, the workers should personally let him know."

That conveyor belt is slowing down that process. That conveyor belt means his factory is less efficient. He gets fewer pieces of furniture out every day than it might otherwise be able to do. That conveyor belt is a part of the problem and the New Source Review keeps him from changing that conveyor belt because they are

afraid that EPA will whisk in on changing that conveyor belt and make them comply with every new standard that's come about since whenever it was they put their process in place. Instead of being able to make small improvements along the way or even change this conveyor belt, they can't get it done because this regulation is too burdensome, so burdensome they had to even go check with the regulatory guy to find out for sure that that was the rule that caused the problem, and it was.

I am not going to tell Mr. Bassett it can't be done. We need to change this rule and I appreciate your help in that regard.

So you disagree with anything I've just said?

Mr. WEHRUM. I do not.

Mr. GRIFFITH. And I appreciate that.

We have heard a lot about electric generation and other things today, and I've just told you this story.

But whatever it is, can you speak to what the EPA is doing on its own? I think the bill is the best way to do it but what's the EPA doing on its own to try to reform the NSR?

Mr. WEHRUM. So a couple comments.

First of all, thank you very much for what you're doing, Mr. Congressman. As you know, I've spent a lot of time on this program in my career. It's a very high priority of mine to make it better and I appreciate your efforts.

I think your example highlights an important aspect of NSR, which is it applies to everybody who emits stuff, not just power plants, not just petroleum refineries.

So a big reason why we need to improve the program is for the furniture makers of the world and the brick plants of the world and the small businesses and the small entities and facilities that grapple with this on a daily basis.

We at EPA are working very hard within the authority we have to improve the program through rule changes and interpretations and policy memos and we are going to continue to try as long as I am here.

Mr. GRIFFITH. Well, and I am glad that we agree that narrow and targeted NSR is necessary but that we need to make some reforms.

And with that, I yield back.

Mr. SHIMKUS. Gentleman's time has expired.

The chair thanks Mr. Wehrum for being here and being patient and answering our questions, and seeing that there are no other members wishing to ask you questions, we will dismiss you and impanel the second group.

[Pause.]

OK. Thank you all for being here. You all saw the first panel so we will recognize each one of your for 5 minutes for an opening statement.

Your full testimony is submitted for the record and we will start with Mr. Sean Alteri, Director, Division of Air Quality, Kentucky Department of Environmental Protection.

Sir, you are recognized for 5 minutes.

**STATEMENTS OF SEAN ALTERI, DIRECTOR, DIVISION OF AIR EQUALITY, KENTUCKY DEPARTMENT OF ENVIRONMENTAL PROTECTION; PAUL BALDAUF, P.E., ASSISTANT COMMISSIONER, AIR QUALITY, ENERGY, AND SUSTAINABILITY, NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION; ROSS E. EISENBERG, VICE PRESIDENT, ENERGY AND RESOURCES POLICY, NATIONAL ASSOCIATION OF MANUFACTURERS; KIRK JOHNSON, SENIOR VICE PRESIDENT, GOVERNMENT RELATIONS, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION; BRUCE BUCKHEIT, ANALYST AND CONSULTANT; JEFFREY R. HOLMSTEAD, PARTNER, BRACEWELL LLP**

**STATEMENT OF SEAN ALTERI**

Mr. ALTERI. Thank you.

Good morning, Chair Shimkus, Ranking Member Tonko, and members of the subcommittee.

My name is Sean Alteri and I currently serve as the director of the Division for Air Quality in Kentucky. I am honored to testify today and share a state's perspective relative to New Source Review.

As an air quality regulator, I applaud your efforts to address elements of the New Source Review permit program. The New Source Review permit program is necessary to protect public health and carry out the congressional declaration of purpose, which is to ensure that economic growth will occur in a manner consistent with the preservation of existing clean air resources.

To effectively administer the New Source Review program, permitting authorities must be provided with regulatory certainty. During this February's New Source Review hearing, Chairman Shimkus correctly noted that there are over 700 guidance memos and documents related to New Source Review. Under Kentucky law, unlike the Federal Government, the cabinet is prohibited from regulating by policy and guidance. Codification of EPA's New Source Review guidance memos will provide regulatory certainty to the permitting authorities as well as the regulated community.

Regarding the proposed reform legislative discussion paper included with this hearing, the narrow scope of the language further defined modification highlights issues related to routine maintenance, repair, and replacement. Pursuant to Section 111 of the Clean Air Act, a physical change to an emissions unit or a change in the method of operation constitutes a modification and it may subject the facility to New Source Review. Due to potential New Source Review requirements and the applicability of New Source Performance Standards, facilities have, unfortunately, foregone efficiency improvements that could provide significant environmental benefits.

In an effort to reduce significant delays in permitting, the proposed amendment to the definition of modification does not apply to projects that implement the efficiency measures. The proposed amendment also addresses projects that are designed to restore, maintain, or improve the reliability or safety of the source and limits the emissions increases to the maximum achievable hourly emission rate demonstrated in the last 10 years.

These proposed amendments will provide the timely issuance of permits. Permitting energy efficiency projects effectively will be critical when EPA issues a clean power plant replacement rule and states are mandated to reduce its CO<sub>2</sub> emission rates from its existing electric-generating units.

In addition, the proposed legislative text also clarifies the term construction under the New Source Review program and when a modification should be subject to New Source Review as a major modification. The proposed statutory text clarification eliminates confusion as to when NSR applies.

Currently, the most difficult aspect of permitting a major emitting facility under NSR is the air dispersion modeling.

Last March, I testified before this subcommittee and expressed the need for EPA to fully develop and codify implementation requirements at the same time the EPA revises a national ambient air quality standard. H.R. 806 proposed to extend the review time of a NAAQS to a period of 10 years, which would allow EPA to resolve the technical deficiencies of the NAAQS evaluation and provide regulatory certainty to permitting authorities. Specifically, air dispersion modeling requirements necessary to evaluate the consequences of any decision to permit increased pollution in an area must be promulgated at the same time the EPA revises a national ambient air quality standard.

As an example, EPA revised the national ambient air quality standard for particulate matter less than 2.5 microns in July of 1997. However, due to technical issues and limitations associated with the inventories as well as the modeling techniques, EPA applied the PM 10 surrogate policy until March 23rd, 2010. EPA's inability to promulgate clear regulatory requirements unnecessarily led to several Title V permit objections.

And to reiterate, EPA must promulgate implementation requirements at the same time it promulgates a new or revised national ambient air quality standard to avoid costly unnecessary delays.

Another example is the 2010 revision to the SO<sub>2</sub> standard. Although the sulfur dioxide standard was revised in 2010, the EPA promulgated amendments to the modeling techniques in February of 2017. These amendments addressed significant unresolved technical limitations of the models. As a result of the regulatory uncertainty, several projects were not able to conduct the necessary evaluations required by the New Source Review program and thus limiting the potential for economic growth and development.

In closing, state, tribal, and local permitting authorities must be provided with regulatory certainty throughout the New Source Review permitting process. The regulatory certainty is necessary to carry out our statutory obligations, which include providing for economic growth and development.

And thank you for the opportunity to participate in today's hearing and I look forward to any questions you may have regarding my testimony.

[The prepared statement of Mr. Alteri follows:]



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TESTIMONY OF SEAN ALTERI

ON

“LEGISLATION ADDRESSING NEW SOURCE REVIEW PERMITTING REFORM”

BEFORE THE

UNITED STATES HOUSE OF REPRESENTATIVES

ENERGY AND COMMERCE SUBCOMMITTEE ON ENVIRONMENT

May 16, 2018

Good morning, Chair Shimkus, Ranking Member Tonko, and members of the Subcommittee. My name is Sean Alteri and I currently serve as the Director of the Kentucky Division for Air Quality. I am honored to testify today and appreciate this opportunity to share a state’s perspective on the New Source Review permitting program.

As an air quality regulator, I applaud your efforts to address elements of the New Source Review permit program. The New Source Review program is utilized by EPA, State, Local, and Tribal air pollution control agencies to attain and maintain compliance with National Ambient Air Quality Standards. The New Source Review program is necessary to protect public health and carry out the Congressional declaration of purpose “to insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources.”<sup>1</sup>

<sup>1</sup> Clean Air Act, CAA § 160(3)

In Kentucky, the New Source Review Program is codified into Kentucky law and approved into the State Implementation Plan by EPA. Prior to the construction of a major emitting facility, the Energy and Environment Cabinet must first issue a permit to the owner or operator of the proposed facility.

To effectively administer the New Source Review program, permitting authorities must be provided with regulatory certainty. During this February's New Source Review hearing, Chair Shimkus correctly noted that there are over 700 guidance memos and documents related to New Source Review. Under Kentucky law, unlike the federal government, the Cabinet is prohibited from regulating by policy and guidance.<sup>2</sup> Codification of EPA's New Source Review guidance memos will provide regulatory certainty to State, Tribal, and Local permitting authorities, as well as the regulated community.

#### **PROPOSED LEGISLATION**

Regarding the proposed reform legislative discussion paper included with this hearing, the narrow scope of the language further defining "modification" highlights issues related to "routine maintenance, repair, and replacement" or "RMRR." Pursuant to Section 111 of the Clean Air Act, a physical change to an emissions unit or a change in the method of operation constitutes a "modification" and may subject the facility to New Source Review. Due to potential New Source Review requirements and the applicability of new source performance standards, facilities have unfortunately forgone efficiency improvements that can provide significant environmental benefits.

Under current New Source Review requirements, an efficiency project that substantially increases utilization of a unit, even if the project reduces emissions on an hourly basis, would require New Source Review. In an effort to reduce significant delays in permitting, the proposed

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<sup>2</sup> KRS 13A.130

amendment to the definition of “modification” does not apply to projects that implement efficiency measures, which reduce the amount of any air pollutant emitted by the source per unit of output. The proposed amendment also addresses projects that are “designed to restore, maintain, or improve the reliability or safety of the source” and limits the emissions increases to the maximum achievable hourly emission rate demonstrated in the last ten years.

These proposed amendments will provide for the timely issuance of permits related to energy efficiency measures. Permitting energy efficiency projects effectively will be critical when EPA issues a Clean Power Plan replacement rule and states are mandated to reduce its CO<sub>2</sub> emission rates from existing electric generating units.

In addition, the proposed legislative text also clarifies the term “construction” under the New Source Review program and when a modification should be subject to New Source Review as a “major modification.” The proposed statutory text clarification provides regulatory certainty and eliminates confusion as to when New Source Review applies.

#### **Relationship to the National Ambient Air Quality Standards**

As mentioned previously, the New Source Review program establishes the preconstruction evaluation to determine whether a project will cause or contribute to a violation of the National Ambient Air Quality Standards. Currently, the most difficult aspect of permitting a major emitting facility under the New Source Review program is air dispersion modeling.

Last March, I testified before this subcommittee and expressed the need for EPA to fully develop and codify implementation requirements at the same time EPA revises a National Ambient Air Quality Standard. HR 806 proposed to extend the review time of a NAAQS to a period of 10 years, which would allow EPA to complete the technical aspects of the NAAQS evaluation and provide regulatory certainty to the permitting authorities. Specifically, the air

dispersion modeling requirements necessary to evaluate the consequences of any decision to permit increased air pollution in an area must be promulgated at the same time EPA revises a National Ambient Air Quality Standard.

As an example, EPA revised the National Ambient Air Quality Standard for particulate matter less than 2.5 microns in July of 1997. However, due to technical issues and limitations associated with the PM<sub>2.5</sub> emissions inventories and modeling techniques, EPA applied the “PM<sub>10</sub> Surrogate Policy” until March 23, 2010.<sup>3</sup> EPA’s inability to promulgate clear regulatory requirements unnecessarily led to several title V permit objections.

To reiterate, EPA must promulgate implementation requirements at the same time it promulgates a new or revised National Ambient Air Quality Standard to avoid costly, unnecessary delays.

Other recent examples of regulatory uncertainty associated with the New Source Review program include the 2010 revisions of the National Ambient Air Quality Standards for oxides of nitrogen (with nitrogen dioxide as the indicator) and sulfur oxides (sulfur dioxide). Although the Sulfur Dioxide standard was revised in 2010, EPA promulgated amendments to the modeling techniques in February of 2017. These amendments addressed significant, unresolved technical limitations of the models. As a result of the regulatory uncertainty, several projects were not able to conduct the necessary evaluations required by the New Source Review program. And thus, limiting the potential for economic growth and development.

In closing, State, Tribal, and Local permitting authorities must be provided with regulatory certainty throughout the New Source Review permitting process of new, modified, and reconstructed stationary sources. The regulatory certainty is necessary to carry out our

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<sup>3</sup> EPA Memorandum, “Modeling Procedures for Demonstrating Compliance with PM<sub>2.5</sub> NAAQS” issued March 23, 2010 by Stephen D. Page, Director, Office of Air Quality Planning and Standards.



statutory obligations, which include providing for economic growth. Thank you for the opportunity to participate in today's hearing and I look forward to any questions you may have regarding my testimony.

Mr. SHIMKUS. Thank you.

The chair now recognizes Mr. Paul Baldauf, professional engineer, assistant commissioner, Air Quality, Energy, and Sustainability, New Jersey Department of Environmental Protection.

Sir, you're recognized for 5 minutes.

#### **STATEMENT OF PAUL BALDAUF**

Mr. BALDAUF. Thank you, Chairman Shimkus, Ranking Member Tonko, and members of the committee for the opportunity to testify today.

My name is Paul Baldauf. I am the Assistant Commissioner for Air Quality, Energy, and Sustainability at the New Jersey Department of Environmental Protection.

I have 30 years of engineering and management experience related to environmental protection. I would like to take the opportunity today to provide a state perspective on the regulatory challenges associated with our mission to protect and improve air quality. As we all understand, air pollution has no respect for state borders. Individual states with effective and robust regulatory programs have little influence to encourage upwind states to similarly control their emissions. The Environmental Protection Agency must lead to ensure a level playing field with all entities held to the same emission standards. Any discussion of New Source Review permitting reform must focus on emissions reduction. Amendments to the NSR process that have the potential to increase emissions cannot be tolerated and these amendments will cause New Jersey to fall out of attainment to the National Ambient Air Quality Standards.

New Jersey is the most densely populated state in the Nation with a long history of air quality challenges. New Jersey has made major improvements in air quality over the last two decades. Today, New Jersey is attaining all the NAAQS except the 70 parts per billion ozone. About half of the air pollution responsible for causing ozone in New Jersey comes from outside of New Jersey. The NSR program and the cost-effective control technologies that exist to reduce emissions have been critical to the improvements of New Jersey's air quality. If the proposed changes are adopted, emissions from out-of-state sources are likely to increase, not only for ozone but for other air pollutants including particulates and air toxics. Governor Murphy has set numerous ambitious climate change goals such as 100 percent clean energy by 2050 in New Jersey. States will be unable to attain the air quality benefits from clean energy if upwind states continue their current levels of emissions.

Adverse health effects—adverse health impacts can come from both short-term and long-term exposure to air pollution.

Maintaining the current NSR program and its associated requirements to reduce emissions with plant upgrades will not only improve the ability of states to attain or maintain NAAQS but will result in greater air toxic reductions. Co-benefit reductions are frequently called out in rulemaking as a secondary benefit. Annual emissions of mercury and hexavalent chromium, a known neurotoxin and a known carcinogen, respectively, both of which are trace elements in coal, would also increase with associated ton per

year increases of other pollutants. Mercury and hexavalent chromium are closely associated with coal power plants and any increase, short term or long term, will have detrimental effects on the environment and public health.

The proposed amendments would alter when a source would be subject to NSR in two key ways—first, a project that increases the efficiency of a unit, regardless of whether the project also increases the annual emissions of the unit, would be exempted from NSR and its associated emission reductions. While increasing efficiency may be desirable, the increase in emissions associated with the change should be evaluated for their impacts.

Second, the proposal would eliminate the requirement to evaluate the project for increases in annual emissions. This could result in major sources expanding the annual capacity of a plant, increasing the number of hours it operates each year without the inclusion of modern air pollution controls or the replacement of older equipment with modern, more efficient equipment and associated lower air pollution.

These amendments would allow it to continue to keep operating at the same level of hourly emissions indefinitely, even though cost-effective technologies exist to reduce emissions, undermine the continuous emissions reductions we've achieved over the last 40 years. Without the required air quality evaluation, there would be no way of knowing if the existing source operation was having adverse effects to the airshed and a source's useful life could be extended indefinitely with no consideration for reducing air pollution leading to continued operation with old and inefficient equipment. These annual emission increases would negatively impact annual air quality standards. States such as New Jersey would find it challenging to remain in attainment within NAAQS if the NSR program eliminated the requirement to evaluate a project for increases in annual emissions.

NSR amendments, as proposed, could result in extension of the life of older power plants with modifications that result in small improvements to energy efficiency while causing significant increases in annual emissions of air contaminants, including carbon dioxide, sulfur dioxide, nitrogen oxide, particulates, mercury, and other hazardous air pollutants. That would be inconsistent with the Clean Air Act, which requires its sources to install best available control technology, lowest achievable emission rate, and maximum achievable control technology when modifying equipment facilities including energy efficiency modifications that would increase emissions of applicable air contaminants.

Thank you again for the opportunity to appear today and to convey New Jersey's perspective on the importance of the NSR program.

I welcome any questions you may have.

[The prepared statement of Mr. Baldauf follows:]

Testimony of Paul D. Baldauf, P.E.

Assistant Commissioner

New Jersey Department of Environmental Protection

Before the House Committee on Energy and Commerce

Subcommittee on Environment

Hearing on

Legislation Addressing New Source Review Permitting Reform

May 16, 2018

Thank you, Chairman Shimkus, Ranking Member Tonko, and the members of the committee for the opportunity to testify today. My name is Paul Baldauf, and I am the Assistant Commissioner for Air Quality, Energy and Sustainability at the New Jersey Department of Environmental Protection.

I have over 30 years of engineering and management experience related to environmental protection. I would like to take the opportunity today to provide a State perspective to the regulatory challenges associated with our mission to protect and improve air quality. As we all understand, air pollution has no respect for state borders. Individual states with effective and robust regulatory programs have little influence to encourage upwind states to similarly control

their emissions. The Environmental Protection Agency must be the lead to ensure a level playing field with all entities held to the same emission standards. Any discussion of New Source Review (NSR) permitting reform must focus on emissions reduction. Amendments to the NSR process that have the potential to increase emissions cannot be tolerated, and these amendments will cause New Jersey to fall out of attainment for the National Ambient Air Quality Standards (NAAQS).

New Jersey is the most densely populated state in the nation with a long history of air quality challenges. New Jersey has made major improvements in air quality over the last two decades. Today New Jersey is attaining all the NAAQS except the 70 ppb Ozone NAAQS. About half of the air pollution responsible for causing ozone in New Jersey comes from outside of New Jersey. The NSR program and the cost-effective control technologies that exist to reduce emissions have been critical to the improvements of New Jersey's air quality. If the proposed changes are adopted, emissions from out of state sources are likely to increase not only for ozone but for other air pollutants including particulates and air toxics. Governor Murphy has set numerous ambitious climate change goals such as 100 percent clean energy by 2050. States will be unable to attain the air quality benefits from clean energy if upwind states continue their current levels of emissions.

Adverse health impacts can come from both short-term exposure and annual exposure to air pollution. PM-2.5 is a good example of a pollutant that has both a daily health standard and an annual standard. The existing NSR addresses both short term increases in air pollution and

annual increases in air pollution through technology evaluation (Best Available Control Technology) and air quality modeling to verify compliance with short term and annual NAAQS and the air quality modeling performed as part of an air quality evaluation.

Maintaining the current NSR program and its associated requirements to reduce emissions with plant upgrades will not only improve the ability of states to attain or maintain NAAQS, but will result in greater air toxics reductions. Co-benefit reductions are frequently called out in rulemaking as a secondary benefit. Annual emissions of mercury and hexavalent chromium, a known neurotoxin and a known carcinogen respectively, both of which are trace elements in coal, would also increase with associated ton per year increases of other pollutants. Mercury and hexavalent chromium are closely associated with coal power plants, and any increase, short term or long term, will have detrimental effects on the environment and public health. Other pollutants of concern include fuel burning products of incomplete combustion at older, less efficient operations; increase in usage and releases (tons per year increase) is not acceptable. These include known air toxics, such as formaldehyde, acrolein, and dioxin. Many of these pollutants are still above acceptable health levels in New Jersey.

The proposed amendments would fundamentally alter the NSR Program. Since its inception in 1977, NSR was designed to allow existing sources to delay upgrades to air pollution controls until the source was engaged in capital expenditures that would increase emissions from the facility. NSR applicability is determined by an annual increase in emissions, caused by a

modification that increases annual use or hourly emissions. At the time of modification, the source would upgrade controls to the best available at the time of review. Thus, as sources age and are modified, emissions from existing sources would be reduced over the life of the equipment.

The proposed amendments would alter when a source would be subject to NSR in two key ways. First, the proposed amendments would exempt sources when, *"...a change in the stationary source that reduces the amount of any pollutant emitted by the source per unit of output."* Thus a project that increases the efficiency of a unit, regardless of whether the project also increases the annual emissions of the unit would be exempted from NSR and its associated emission reductions. While increasing efficiency may be desirable, the increases in emissions associated with the change should still be evaluated for their impacts.

An example of this concern is an electric generating unit that undergoes changes to increase its efficiency while also increasing the maximum heat input, or amount of fuel burned per hour, to increase electric output. This project would decrease the pounds of CO<sub>2</sub> and some other pollutants emitted per megawatt-hour, but would increase the megawatts generated. Without additional controls, such a project would result in both increased hourly and annual emissions of all its pollutants, including CO<sub>2</sub>, criteria pollutants and air toxics, resulting from the increased fuel use. These increased emissions could likely result in adverse health impacts despite the increase in efficiency of the unit.

New Jersey has had several upgrades of gas turbine electric generating units to increase efficiency and electric output. One example is a project NJDEP approved in 2017 at the PSEG Fossil, LLC Bergen Generating Station in Ridgefield New Jersey. This project involved:

- Replacing compressor inlet guide vanes, compressor blades and compressor stator vanes.
- Replacement of existing turbine buckets, turbine nozzles, and shrouds in the hot gas path using parts with enhanced blade geometry design and coatings to withstand higher operating temperatures and pressures.
- An increase in firing temperature and compressor mass flow, which improved the overall gas turbine output and efficiency across the operating range.

To increase the firing temperature and compressor mass flow, it is necessary to increase the turbines hourly fuel use, otherwise known as heat input. In this case, the electric output was increased by approximately 6.3 percent, while the hourly fuel burned increased by 0.47 percent to 5.9 percent, depending on load and ambient temperature.

As stated before, increasing the fuel burned increases the emissions of all pollutants associated with the turbine, even though the emissions per megawatt-hour of those pollutants might



decrease. In this case, it was determined that there would be an increase in actual hourly and annual emissions despite an increase in efficiency.

Second, the proposal would eliminate the requirement to evaluate the project for increases in annual emissions. This could result in major sources expanding the annual capacity of a plant (increasing the number of hours it operates each year) without the inclusion of modern air pollution controls or the replacement of the older equipment with modern more efficient equipment and associated lower air pollution.

By removing the requirement to upgrade air pollution controls and evaluate the air quality impacts of the existing facility when annual emissions increase, sources could continue to keep operating at the same level of hourly emissions indefinitely even though cost effective technologies exist to reduce emissions, undermining the continuous emissions reductions achieved over the last 40 years. Without the required air quality evaluation, there would be no way of knowing if the existing source operation was having adverse impacts to the airshed, and a source's useful life could be extended indefinitely with no consideration for reducing air pollution leading to continued operation of old and inefficient equipment. These annual emission increases would negatively impact annual air quality standards including PM-2.5. States such as New Jersey would find it challenging to remain in attainment with the NAAQS if the NSR program eliminated the requirement to evaluate a project for increases in annual emissions.

NSR amendments, as proposed, could result in the extension of the life of older power plants, with modifications that result in small improvements to energy efficiency, while causing significant increases in annual emissions of air contaminants, including carbon dioxide, sulfur dioxide, nitrogen oxides, particulates, mercury and other hazardous air pollutants. That would be inconsistent with the Clean Air Act, which requires that sources install best available control technology, lowest achievable emission rate, and maximum achievable control technology, when modifying equipment facilities, including energy efficiency modifications that would increase emissions of applicable air contaminants.

Thank you again for the opportunity to appear today and convey New Jersey's perspective on the importance of the NSR program. I welcome any questions you may have.

## Summary of Paul D. Baldauf's Testimony

New Jersey has made major improvements in air quality over the last two decades. Today New Jersey is attaining all the National Ambient Air Quality Standards (NAAQS) except the 70 ppb Ozone NAAQS. About half of the air pollution responsible for causing ozone in New Jersey comes from outside of New Jersey. The NSR program is a critical part of the reason New Jersey's air has continued to improve.

Adverse health impacts can come from both short-term exposures and annual exposures to air pollution. The existing NSR addresses both short term increases in air pollution and annual increases in air pollution through technology evaluation (Best Available Control Technology) and air quality modeling to verify compliance with short term and annual NAAQS and the air quality modeling performed as part of an air quality evaluation.

NSR amendments, as proposed, could result in the extension of the life of older power plants, with modifications that result in small improvements to energy efficiency, while causing significant increases in annual emissions of air contaminants, including carbon dioxide, sulfur dioxide, nitrogen oxides, particulates, mercury and other hazardous air pollutants. That would be inconsistent with the Clean Air Act, which requires that when sources modify equipment facilities install best available control technology, lowest achievable emission rate, and maximum achievable control technology, for modifications, including energy efficiency modifications that would increase emissions of applicable air contaminants.

Mr. SHIMKUS. Thank you very much.

The chair now recognizes Mr. Ross Eisenberg, Vice President, Energy and Resources Policy, National Association of Manufacturers.

You're recognized for 5 minutes.

#### STATEMENT OF ROSS EISENBERG

Mr. EISENBERG. Thank you, and good morning, Chairman Shimkus, Ranking Member Tonko, members of the subcommittee.

Thank you for the opportunity to be here today to talk about manufacturers' continued dedication to reducing air emissions.

The manufacturing sector is cleaner, more efficient, and, frankly, more responsible than we have ever been. This is not merely lip service. About 94 percent of the manufacturers listed on the Fortune 500 have in place a sustainability plan and they are keeping to it. Now, this commitment has yielded extremely positive results in terms of air emissions. Since 1970, the manufacturing sector has reduced its emissions of nitrogen oxides by 53 percent, carbon monoxide by 70 percent, sulfur dioxide by 90 percent, coarse particulate matter by 83 percent, and VOCs by 47 percent. Fine particulate matter, PM 2.5, is down by 23 percent since its peak for manufacturers in 1999 and greenhouse gases are down by 10 percent over the past decade. The industrial sector actually produces less greenhouse gas emissions than it did in 1990, which is considerably different than the broader economy.

We appreciate the opportunity to testify today on a draft bill that would clarify the degree of physical or operational change to an emissions source that would constitute a modification under NSR. The NAM supports this bill because it would remove barriers that have prevented manufacturers from investing in efficiency projects and installing modern pollution control equipment at their facilities.

The purpose of NSRs for requiring industrial facilities to install modern pollution control equipment when they are built or when they're making a change that it results in significant increase of emissions. In practice, however, NSR does stand in the way of the technologies that the statute was supposed to promote. I realize this is well-worn territory here and one that EPA has for years tried to fix.

But I believe the need today is even greater than it was before. First of all, there is near universal adoption, as I said, across the manufacturing sector—the sustainability plans that are driving continued targets and continued progress. It's spurring a continuing need on shop floors to do things differently and make those technology upgrades.

Secondly, there is the recently enacted tax reform package which, because of things like full expensing and other things, now provides an interesting little window for manufacturers to justify making these investments in more efficient emissions-friendly technologies.

And then, finally, there's, honestly, the regulatory reality—that there are significant new laws like MATS and boiler MACT that require—requiring and demanding cleaner and more efficient electricity generation. And if you believe, as we do at the NAM, that

the EPA should fill the void left by a repeal of the Clean Power Plan with a replacement regulation, you're still going to need to fix NSR at some point to make that work.

A significant portion of the existing gas turbine and steam turbine fleet could benefit from equipment upgrades to improve their efficiency and operational flexibility, particularly given that many are now being used in a different fashion because of the onset of renewable energy and the way that the grid operates. These upgrades for gas and steam turbines will ensure higher grade efficiency and lower emissions in supporting renewable energy use.

However, NSR has stood in the way of customer adoption of these technologies. For example, an NAM member company that manufactures gas turbine upgrade technology could improve the vast majority of those in-service turbines by 2.5 percent and reduce their total CO<sub>2</sub> emissions by 6.5 percent. They report their customers are choosing not to install this equipment simply because it triggers NSR.

An inability to define what is routine maintenance has resulted in NSR notices of violation being issued for environmentally beneficial projects. The Utility Air Regulatory Group has cited more than 400 instances in which a regulated entity took on a project to improve the efficiency of a power plant only to face notices of violation or citizen suits over violating NSR. Same thing happens at industrial facilities. Our members have had trouble with projects involving switching from coal to gas or from number six fuel oil to low-sulfur distillate oil.

Despite the obvious emission benefits of this, these projects have periodically triggered NSR because they—because of collateral emissions for carbon monoxide and VOCs, which becomes a barrier to undertaking the project.

One of our members estimates that there's 100 million tons of CO<sub>2</sub> that could be possibly reduced by deploying the full suite of available turbine upgrades into power plants. If these were to happen, we are talking about the equivalent of more than 20 million cars being taken off the road. That's 10 percent of the entire automobile fleet. And that's just for the power plant sector. The same technologies would work for turbines and industrial facilities as well. Many of these upgrades have been impeded because they may, honestly, potentially trigger NSR.

The draft legislation that is the subject of the hearing today would create flexibility in the definition of modifications so that these heat rate improvements and efficiency upgrades would not be deterred by NSR.

It would eliminate a situation where a piece of this new modern equipment would trigger it because it generates collateral emissions of another pollutant and, most importantly, it would unlock a potentially massive market for the installation of energy efficient technologies that would drive our already impressive emissions reductions down even further.

No matter our political, personal, or employment background, we all share the same goal, which is to permanently reduce pollution. We believe this bill will get us to that end goal by reducing barriers to the installation of efficient and environmentally beneficial technologies.

Thank you.

[The prepared statement of Mr. Eisenberg follows:]



*Leading Innovation. Creating Opportunity. Pursuing Progress.*

## Testimony

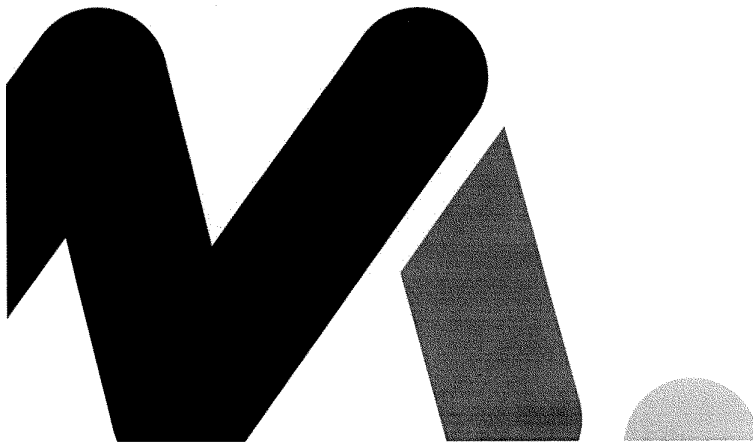
**of Ross Eisenberg**  
Vice President

Energy and Resources Policy  
National Association of Manufacturers

*before the House Committee on Energy and Commerce*  
Subcommittee on Environment

*on "Legislation Addressing New Source Review Permitting Reform"*

May 16, 2018



### SUMMARY OF TESTIMONY

The manufacturing sector is cleaner, more efficient and more responsible than it has ever been. This commitment has yielded extremely positive results in terms of emissions. The manufacturing sector has reduced its emissions of nitrogen oxides (NO<sub>x</sub>) by 53 percent since 1970, carbon monoxide (CO) by 70 percent since 1970, sulfur dioxide (SO<sub>2</sub>) by 90 percent since 1970, coarse particulate matter (PM<sub>10</sub>) by 83 percent since 1970, volatile organic compounds (VOC) by 47 percent since 1970, fine particulate matter (PM<sub>2.5</sub>) by 23 percent since its peak in 1999, and greenhouse gases (GHGs) by 10 percent over the past decade. The industrial sector actually produces *less* GHG emissions than it did in 1990, a considerably different story compared to the broader U.S. economy.

The NAM appreciates the opportunity to testify regarding draft legislation that would clarify the degree of physical or operational change to an emissions source that would constitute a "modification" sufficient to trigger New Source Review (NSR). The NAM supports this bill because it would remove barriers that have prevented manufacturers from investing in efficiency upgrades and installing modern pollution control equipment at their facilities.

The purpose of NSR is to require industrial facilities to install modern pollution control equipment when they are built or when making a change that increases emissions significantly. In practice, however, NSR often stands in the way of efficiency upgrades and environmentally beneficial projects.

Control technologies are perpetually improving. Unfortunately, administration of the NSR program has contributed to a fair amount of inertia. NSR has stood in the way of customer adoption of technologies that would improve the efficiency of gas and steam turbines. It presents a huge impediment to the installation of more efficient technologies that would ultimately combat climate change.

The draft legislation that is the subject of today's hearing would create flexibility in the definition of "modification" so that these heat rate improvements and efficiency upgrades will not be deterred by the threat of NSR. It would eliminate the situation where a piece of modern control technology triggers NSR because it generates collateral emissions of another pollutant. Most importantly, it could unlock a massive market for the installation of efficient technologies that would drive manufacturers' already-impressive emissions reductions down even farther.

**TESTIMONY OF ROSS EISENBERG  
BEFORE THE HOUSE COMMITTEE ON ENERGY AND COMMERCE  
SUBCOMMITTEE ON ENVIRONMENT**

Hearing on:  
“Legislation Addressing New Source Review Permitting Reform”

**MAY 16, 2018**

Good morning, Chairman Shimkus, Ranking Member Tonko and members of the Subcommittee on Environment. My name is Ross Eisenberg, and I am the vice president of energy and resources policy at the National Association of Manufacturers (NAM). The NAM is the nation’s largest industrial trade association, representing nearly 14,000 small, medium and large manufacturers in every industrial sector and in all 50 states. I am pleased to represent the NAM and its members and provide testimony on manufacturers’ continued commitment to reduce air emissions.

Manufacturers have sharply reduced our impact on the environment through a wide range of innovations, such as increasing energy efficiency, saving and recycling water, and implementing successful initiatives to reduce pollution and waste. Through these traditional and innovative measures, manufacturers have helped to usher in a new era of a cleaner and more sustainable environment.

The manufacturing sector is cleaner, more efficient and more responsible than it has ever been. This is not merely lip service: 94 percent of the manufacturers listed on the *Fortune* 500 have a sustainability plan in place for their company.



This commitment has yielded extremely positive results in terms of emissions. For every major air pollutant regulated by the Environmental Protection Agency (EPA), the manufacturing sector has made dramatic reductions for several decades. Today's manufacturing company is a sleek, technology-driven operation that looks nothing like the industrial facilities of the past. With that progress has come a smaller environmental footprint.

Consider the following:

- Manufacturing sector emissions of nitrogen oxides (NO<sub>x</sub>), a criteria pollutant and the primary precursor of ozone, have dropped by 53 percent since 1970.<sup>1</sup>
- Manufacturing sector carbon monoxide (CO) emissions have dropped 70 percent since 1970.<sup>2</sup>
- Manufacturers have reduced our emissions of coarse particulate matter, or PM<sub>10</sub>, by 83 percent since 1970.<sup>3</sup>
- The manufacturing sector has reduced emissions of fine particulate matter, or PM<sub>2.5</sub>, by 23 percent since their peak in 1999.<sup>4</sup>
- Since 1970, the industrial sector has reduced its sulfur dioxide (SO<sub>2</sub>) emissions by 90 percent.<sup>5</sup>

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<sup>1</sup> EPA National Emissions Inventory, available at <https://www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei>.

<sup>2</sup> *Id.*

<sup>3</sup> *Id.*

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

- Since 1970, manufacturers have reduced our emissions of volatile organic compounds (VOC), which mix with NO<sub>x</sub> to form ground-level ozone, by 47 percent.<sup>6</sup>
- Just over the past decade, manufacturers have reduced our greenhouse gas (GHG) emissions by 10 percent while increasing our value to the economy by 19 percent. The industrial sector actually produces *less* (GHG) emissions than it did in 1990, a considerably different story compared to the broader U.S. economy.<sup>7</sup>

Manufacturers are committed to sustainability and have taken strong, meaningful steps to address our past, present and future environmental challenges. Last month, the NAM and the U.S. Department of Energy (DOE) announced the *Sustainability in Manufacturing Partnership*.<sup>8</sup> This partnership will provide a national platform to highlight manufacturers' environmental stewardship and encourage the adoption of energy-efficient and sustainable practices. This partnership means better access for manufacturers to DOE's Advanced Manufacturing Office (AMO) and the expertise and programs they provide to manufacturers seeking to improve their energy efficiency and sustainable practices. We intend for this to be a long-term partnership between DOE and the

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<sup>6</sup> *Id.*

<sup>7</sup> Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2015, available at [https://www.epa.gov/sites/production/files/2017-02/documents/2017\\_complete\\_report.pdf](https://www.epa.gov/sites/production/files/2017-02/documents/2017_complete_report.pdf).

<sup>8</sup> <https://www.energy.gov/articles/us-department-energy-and-national-association-manufacturers-announce-sustainability>.

NAM to communicate what manufacturers are doing to protect the environment and work together to solve our emerging energy and environmental challenges.

#### **Comments on Draft New Source Review (NSR) Legislation**

The NAM appreciates the opportunity to testify regarding draft legislation that would clarify the degree of physical or operational change to an emissions source that would constitute a “modification” sufficient to trigger New Source Review (NSR). The NAM supports this bill because it would remove barriers that have prevented manufacturers from investing in efficiency upgrades and installing modern pollution control equipment at their facilities.

The NSR program is a federal air permitting program under the Clean Air Act that applies to new facilities or major modifications to facilities. The purpose of NSR, according to the EPA, is to require industrial facilities “to install modern pollution control equipment when they are built or when making a change that increases emissions significantly.”<sup>9</sup> In practice, however, NSR often stands in the way of efficiency upgrades and the installation of modern pollution control equipment.

A significant portion of the existing gas turbine and steam turbine fleet could benefit from equipment upgrades to improve their efficiency and operational flexibility, particularly given that many are now being used differently (e.g., as load-following) in conjunction with growing renewable generation. These upgrades for gas and steam turbines will ensure higher grid efficiency and lower

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<sup>9</sup> <https://www.epa.gov/sites/production/files/2015-12/documents/nsrbasicsfactsheet103106.pdf>.

emissions in supporting renewable energy use. However, NSR has stood in the way of customer adoption of these technologies.

For example, a NAM member company manufactures gas turbine upgrade technology that could improve the vast majority of in-service gas turbines by 2.6 percent and reduce their total carbon dioxide (CO<sub>2</sub>) emissions per megawatt-hour (MWh) by 6.5 percent. This company reports that its customers are choosing not to install this equipment simply because it triggers NSR. The company is facing the same impediments for large and small fossil steam turbines, such as steam path redesign technologies, rotor replacement, and steam turbine warming systems.

NSR also presents a huge impediment to the installation of more efficient technologies that would ultimately combat climate change. An inability to define what is "routine maintenance" has resulted in NSR Notices of Violation being issued for environmentally beneficial projects like economizer replacement, steam turbine upgrades, feed water heater replacements, and similar activities. In comments to the EPA's draft Clean Power Plan, the Utility Air Regulatory Group (UARG) cited more than 400 instances in which a regulated entity took on a project to improve the energy efficiency of a power generation unit, only to be targeted by the EPA or citizen suits alleging that it had violated NSR.<sup>10</sup>

Control technologies are perpetually improving. Unfortunately, administration of the NSR program has contributed to a fair amount of inertia.

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<sup>10</sup> Comments of the Utility Air Regulatory Group on Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, Docket ID EPA-HQ-OAR-2013-0602-22768, Attachment A (Dec. 1, 2014).

NSR should not operate as an incentive for manufacturers to operate their plants exactly as they were built, and only to replace parts with the exact same part that existed when the plant was built.

The draft legislation that is the subject of today's hearing would create flexibility in the definition of "modification" so that these heat rate improvements and efficiency upgrades will not be deterred by the threat of NSR. It would eliminate the situation where a piece of modern control technology triggers NSR because it generates collateral emissions of another pollutant (e.g., technologies that reduce NO<sub>x</sub> but increase CO). Most importantly, it could unlock a massive market for the installation of efficient technologies that would drive manufacturers' already-impressive emissions reductions down even farther.

### **Conclusion**

Manufacturers have established a strong record of environmental protection and strive to reduce the environmental footprint of our operations and to become more sustainable. The results are already impressive, and they get better with each passing year. The NAM supports legislation to remove barriers to the installation of energy efficient and environmentally beneficial technologies, key steps toward addressing the environmental challenges of current and future generations.

Mr. SHIMKUS. The Chair thanks the gentleman.

The Chair now recognizes Mr. Kirk Johnson, Senior Vice President, Government Relations, National Rural Electric Cooperative Association.

You're recognized for 5 minutes. Thank you.

#### STATEMENT OF KIRK JOHNSON

Mr. JOHNSON. Thank you, Chairman Shimkus, Ranking Member Tonko, members of the subcommittee. It's a pleasure to be with you here. Thank you very much for the invitation.

I am here representing 900 rural electric cooperatives, representing 47 states across the country. We, collectively, power rural America but we do much, much more than that. We are the engines of economic development across much of rural America and we are very proud of our history of doing that, doing things that other companies would not do.

Mr. Eisenberg referenced Fortune 500 companies. We are not Fortune 500. We are purely Main Street and that's who we represent. Being consumer owned means we have our consumers' best interests at heart 24 hours a day, seven days a week, 365 days a year. We employ 71,000 people across the country. We serve 88 percent of the counties across the country. One of every eight people gets their electricity from a rural electric cooperative nationwide. That's 42 million Americans.

We have a different generation portfolio than much of the rest of the industry at retail. Overall, 41 percent of our power comes from coal, 26 percent comes from natural gas, 17 percent comes from wind, hydropower, solar, and other renewable resources, and 15 percent comes from nuclear. But we generate just 5 percent of the power generated in the country and we sell at retail 13 percent.

So the remaining balance of the power that we provide at retail comes from other sources. But of the power that we self-generate, 61 percent comes from coal—that's down from 80 percent in 2003—26 percent comes from natural gas—up from 7 percent in 2003—10 percent from nuclear.

We don't self-generate much by way of renewables because the tax credits to incentivize those renewables are available to the tax-paying utilities, the investor-owned utilities, but not to—not to us. So we generally get that power through purchase power agreements.

We've made significant reductions in our emissions profile over the past 15 years. Between 2009 and 2016, SO<sub>2</sub> emissions are down 66 percent, NO<sub>x</sub> emissions are down 24 percent, and CO<sub>2</sub> emissions are down 8 percent.

Let's talk about New Source Review, the subject of this hearing. We have been seeking reforms to the NSR program for two decades now and we think the time is now to act.

Representative Barton said this is a complicated issue. He's absolutely right. When I first heard about New Source Review, I thought it was a one-hit wonder 1990s boy band name. But it certainly is not that. It's something that actually impedes our ability to make progress on running our power plants as efficiently as we can and it certainly has a role in protecting the air quality of the country.

Well, we need to remember that the goal of the Clean Air Act is not to ensure that power plant X or power plant Y has a piece of equipment X or piece of equipment Y on it. The goal and purpose of the Clean Air Act is to protect the air quality of this country so that people can breathe well. As a child, I had asthma. I know what it feels like not to be able to breathe and none of us want that situation in our country anywhere in our country, and that's why we continue to make these reforms.

But the driving forces behind the emissions reductions coming from the electric cooperative sector and the electric utility sector overall don't just come from the NSR program. In fact, that's probably a very limited role. Under the other rules we have to follow, under the MATS rule, the CSPA rule, our Title V permits, all of those are what keep our emissions on a downward trajectory, coupled with changes in the economy. So we should not and must not look at NSR in a vacuum and we must look at the overall effort that is under the Clean Air Act and whether we are making that progress or not.

On NSR reform, we see NSR as a barrier to making common sense efficiency improvements in our power plants and there are circumstances in today's power sector that are changing that are making it even more difficult for us to do that.

Coal-based power plants didn't used to cycle up and down. Now they're being required to cycle up and down to follow renewable resources, especially in the Great Plains, and I know great examples in my home State of North Dakota. That cycling up and down puts more wear and tear on those power plants and the need to maintain those power plants then is even more central to keep that power flowing to the places that they're going, even as we are building up more renewables in those areas.

So being able to address that in today's world. What was considered routine maintenance maybe 20 years ago may be different than what is routine today because of some of those changes in the power sector and the rules of the road need to recognize that.

So we are seeking those common sense reforms such as those contained in Congressman Griffith's draft bill. All we are asking and all we've ever asked is for clear rules of the road. We will follow them. We will make sure that we accomplish the objectives that are laid out in the Clean Air Act. But if we don't have clear rules of the road, we become very risk averse and we leave opportunities on the shelf that can improve the performance of the electric power sector, keep our consumers' costs down while continuing to meet all the clean air goals of this country.

Thank you for the opportunity to be here, Mr. Chairman, and I look forward to your questions.

[The prepared statement of Mr. Johnson follows:]



**Testimony of Kirk Johnson**  
**Senior Vice President for Government Relations**  
**National Rural Electric Cooperative Association**

**to the Environment Subcommittee of the**  
**Committee on Energy and Commerce**  
**U.S. House**

**May 16, 2018**



**Introduction**

Chairman Shimkus, Ranking Member Tonko, and members of the subcommittee, thank you for inviting me to testify. I am delighted to be here to discuss how America's electric cooperatives generate and distribute affordable, reliable electricity that powers the economy of rural America in ways that reduce emissions and improve the quality of life for those living in the communities served by electric cooperatives.

Specifically, I appreciate the opportunity to address how the Clean Air Act's New Source Review program impacts those efforts. NSR has more often served as an impediment, rather than an enhancement, to maintaining and improving efficiency at power plants. NRECA believes Congressional action, including Congressman Griffith's draft legislation, can help improve the broken NSR process.

**Background**

I serve as Senior Vice President for Government Relations for the National Rural Electric Cooperative Association (NRECA). At NRECA, I am responsible for leading NRECA's policy, advocacy, and political activities, and I have worked on energy and environmental issues in Washington, D.C. for more than 25 years. NRECA is the national service organization that represents the nation's more than 900 not-for-profit, consumer-owned electric cooperatives. This includes 62 generation and transmission (G&T) cooperatives, which provide wholesale power to distribution cooperatives.

through their own electric generation facilities or by purchasing power produced by other generators.

Electric co-ops provide power to 42 million people across 56 percent of the nation's landmass and 88 percent of U.S. counties. Electric co-ops are also economic engines in their communities, providing 71,000 jobs across America and investing \$12 billion annually in local economies. They own and maintain 42 percent of U.S. electric distribution lines, which provide power to more than 19 million businesses, homes, schools, and farms in 47 states.

As not-for-profit utilities providing power at-cost to our member-consumers, however, electric cooperatives are ultimately responsible for consistent and reliable service while keeping costs down. Electric co-ops face very different economic challenges than others in the utility sector. Co-ops serve an average of 8 consumers per mile of electric line and collect annual revenue of only \$19,000 per mile; compared to all other utilities which average 32 customers per mile and collect \$79,000 in revenue per mile. And electric cooperatives serve more than 90 percent of the nation's persistent poverty counties within low or sparsely populated geographic areas.

NRECA's members generate power using a wide array of fuels including coal, natural gas, hydro, wind, solar, nuclear, and a very limited amount of oil and diesel. Electric co-ops generate approximately five percent of all the power produced in the country, and

sell approximately 13 percent of all electricity sold at retail. Purchases from other generators make up the difference between the power we generate and the power we sell to end-use consumers.

In 2016, the last year for which data is available, coal-based generation accounted for 41 percent of the power sold by co-ops, while natural gas made up 26 percent, renewable resources accounted for 17 percent, and nuclear generation made up 15 percent of the power we sold to retail consumer-owners. (Oil and diesel fuel accounted for approximately one percent.) Electric cooperatives are also leaders in the development and deployment of renewable energy in rural America. Since 2010, cooperative non-hydropower renewable energy capacity has seen a 130 percent increase, and co-op solar capacity is more than four times what it was in 2015.

#### **Historical Context**

Most of the cooperative-owned coal-based power plants were constructed in the late 1970s and early 1980s, which was a period of significant growth in electricity demand from rural America coupled with federal policies that heavily promoted the use of domestic coal as a generation resource. The policies laid out by Congress and President Ford in response to the 1973 oil crisis, and the subsequent Power plant and Industrial Fuel Use Act of 1978 under President Carter, essentially prevented the use of natural gas as a fuel to generate electricity. And the significant costs to construct nuclear power plants, compounded by the Three Mile Island accident in 1979, precluded nuclear as a

viable option. As a result, many cooperatives invested in and constructed coal-based generation.

By all estimates, coal-based generation will continue to play an important and significant role in keeping the lights on in rural communities across the nation. It is critical that we work together to ensure that these existing units can operate efficiently and reliably while also continuing to meet environmental standards. One of our Seven Cooperative Principles is 'Concern for Community,' which includes support for the sustainable development of our communities and care for a healthy environment. There's an old saying that in rural America we all live downstream from someone. Electric co-ops understand this, and work every day to care for their neighbors and to be the best environmental stewards they can be. That is why we have a proud legacy of managing and reducing emissions from the plants that power these communities.

From 2009 to 2016, cooperatives have reduced sulfur dioxide emissions by 66 percent and nitrogen oxide emissions by 24 percent. They have also reduced carbon dioxide emissions eight percent since 2005 while increasing generation by 15 million megawatt-hours. NRECA is also a proud partner in the Wyoming Integrated Test Center (ITC), along with Tri-State Generation and Transmission Cooperative, Basin Electric Power Cooperative, and the State of Wyoming. This advanced test center is working to demonstrate carbon capture and utilization technologies using 20 MW of actual coal-fired flue gas. The ITC will be a host-site next summer for the NRG COSIA Carbon

XPRIZE, a competition to incentivize the development of technologies to convert CO<sub>2</sub> into marketable products.

Any and all costs incurred by our cooperative generators, including the construction and maintenance of generation sources, are ultimately passed on to the cooperative electric consumers. There are no equity investors that can share the burden of these costs. That is why our cooperative members are committed to running their plants as efficiently and cost-effectively as possible. NRECA supports our members in that goal. NRECA has worked with cooperatives and others in the utility sector, including the Electric Power Research Institute, to research and develop new and improved technologies, processes, and systems for their facilities. This includes work on boiler tubes, turbines, condensers, cyclical operations best practices, and other unit maintenance needs. The Department of Energy also supports these efforts through its own innovative work to improve operations at coal- and gas-based power plants.

#### **New Source Review**

But federal regulatory policies such as New Source Review often get in the way of utilities adopting such technologies that would actually improve power plant efficiency and reliability as well as reducing emissions. The NSR program is overly complicated and creates significant litigation uncertainty for regulated entities. One significant obstacle of the NSR permitting program is its application to equipment repair and replacement as well as even routine maintenance activities at existing generating units.

Although routine maintenance, repair, and replacement are supposedly excluded from being considered as “major modifications,” (and thus not subject to NSR) what qualifies as these NSR exemptions often changes with shifting EPA interpretations. This has led to utilities performing what they thought qualified as routine maintenance, repair, and replacement, only to be cited for NSR violations years after the fact. Second, the inherently flawed annual emissions rate test in use today has created many missed opportunities for power plants to operate to their full potential. Innovative technologies and systems to improve facilities have been “left on the shelf” because under today’s rules (a) these projects unnecessarily trigger NSR even though the projects reduce hourly emission rates, and (b) the costs to meet overly stringent NSR requirements may make the plant no longer cost-effective to operate. As a result of these concerns, NSR in its current form can often undermine the goals and intent of the Clean Air Act.

Clear and targeted direction from Congress can help fix the NSR challenges. Even as EPA is taking steps to update guidance and address specific issues, legislation from Congress would provide an additional layer of certainty. Rep. Griffith’s draft legislation would take a major step forward in simplifying the program and providing greater certainty for power generators. One of the most effective ways the legislation would help is by amending the definition of a “modification” under NSR so that the “trigger” is based on the maximum achievable hourly emission rate rather than on annual emissions. This improvement will better align the NSR program with other Clean Air

Act permitting programs, particularly the New Source Performance Standard program under section 111 of the Act. Without this legislative change, power plants would continue to be deterred from undertaking various projects for fear that running more often throughout the year – even if they reduce their hourly rate of emissions – might result in unjustifiable additional costs and regulations from the EPA. We also appreciate Rep. Griffith's efforts to ensure that any projects undertaken to actually increase energy efficiency, reduce pollution, or ensure reliability of the source would not trigger similar obstacles under NSR. Overall, this legislation will assist electric cooperatives as they continue providing affordable and reliable electricity to the communities they serve.

Thank you again for inviting me to testify on this important issue. I would be happy to answer any questions you may have.

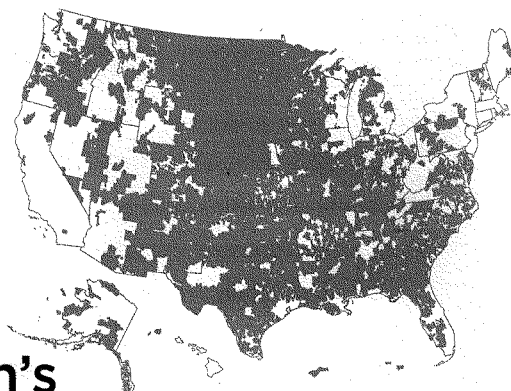
## America's Electric Cooperatives

From booming suburbs to remote rural farming communities, America's electric cooperatives are energy providers and engines of economic development for more than 19 million American homes, businesses, farms and schools in 47 states.

833 distribution  
and 62 generation  
& transmission  
cooperatives

**Power**

**56%**  
of the nation's  
landmass.



Own and maintain

**42%**

(2.6 million miles)  
of U.S. electric  
distribution lines.

Power more than

**19 million**

businesses, homes,  
schools and farms.

Serve

**42 million** people

across **88%** of U.S. counties.

**Distribution cooperatives** are the foundation of the electric cooperative network. They are the direct point of contact with co-op members in the delivery of electricity and other services.

**Generation & transmission cooperatives** provide wholesale power to distribution co-ops through their own electric generation facilities or by purchasing power on behalf of the distribution members.

For more information, visit: [www.electric.coop](http://www.electric.coop) | @NRECAnews

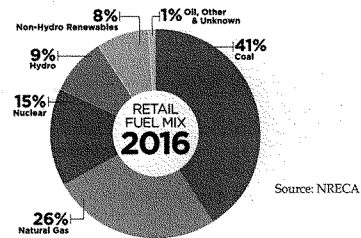




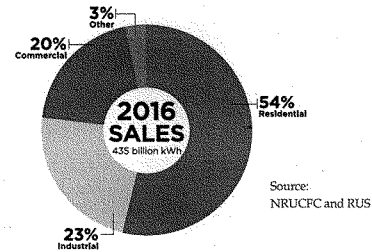
## Electricity use and fuel mix

Electric cooperatives play a vital role in transforming the electric sector. Advanced communications and automation technology enable co-ops to improve the resiliency and efficiency of their systems as they reduce environmental impacts by adding renewable resources.

*Note: Non-hydro renewables includes owned and directly purchased generation, plus generation in the mix from wholesale market purchases.*

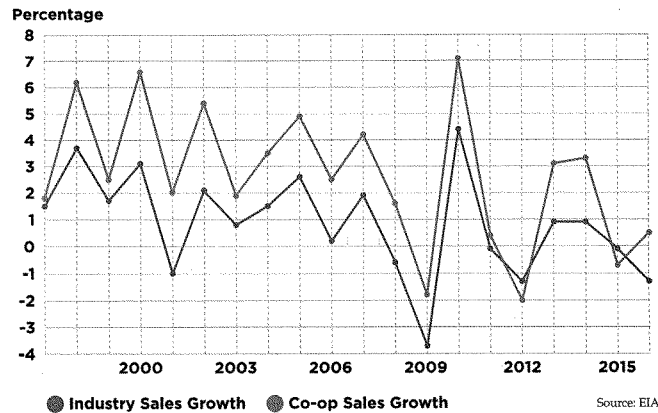


- Co-ops added **295,995 new members** in 2016
- **84%** of electric co-ops had a net increase in members in 2016
- Electricity demand at co-ops increased about one-half of a percent in 2016, with co-op **retail sales reaching 435 billion kilowatt-hours**
- Co-op residential electricity sales increased **0.4%**
- Commercial & industrial increased **0.3%**; irrigation sales jumped **10.5%**



## Electricity sales growth

Co-op sales growth rates generally surpass that of the electric utility industry as a whole.



Co-ops generate **5%** of total U.S. electricity

and

sell **13%** of all U.S. electricity

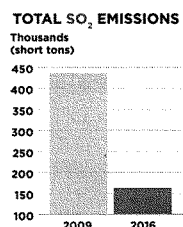
## Co-ops are reducing emissions ...

### Cleaner air:

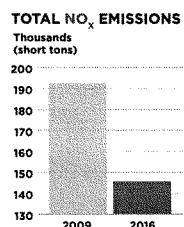
Cooperatives are reducing emissions through a combination of emission-reduction measures at power plants and fuel switching to natural gas and renewables.

### Co-ops have:

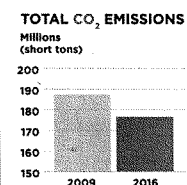
Reduced **sulphur dioxide** emissions 66% during 2009-2016.



Reduced **nitrogen oxide** emissions 24% during 2009-2016.



Reduced **carbon dioxide** emissions 8% since 2005 while increasing generation by 15 million megawatt-hours.



Source: EPA and EIA

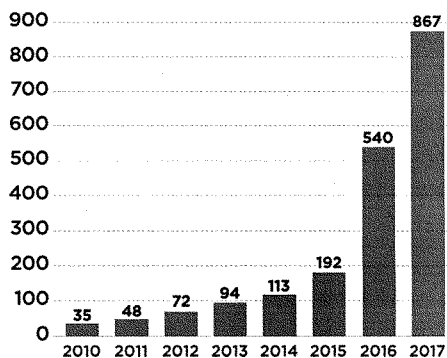
## ... and jump starting renewable energy growth



- Since 2010, co-op non-hydro **renewable energy** capacity has more than doubled from 4 gigawatts to 9.2 gigawatts —a 130% increase. More than 90 percent of electric co-ops provide electricity generated by renewable energy resources.
- Co-ops purchase 10 gigawatts of **hydropower** from federal power marketing administrations.
- More than 560 co-ops in 37 states use 6.9 gigawatts of **wind** energy.
- Total **solar** energy capacity at electric cooperatives is more than four times what it was in 2010, capable of generating more than 860 megawatts of electricity.
- A Department of Energy partnership with 17 electric co-ops has supported the development of 23 megawatts of **utility-scale solar** in 15 states.

### Cooperative solar is skyrocketing

Solar Capacity  
(megawatts AC)



NOTE: Co-op solar capacity owned or purchased under contract

Source: NRECA

## The cooperative difference



Electric co-ops are local energy and technology providers. They are shaped by the specific needs of the communities they serve. This local, member-owned structure is one reason why cooperatives enjoy the highest consumer-satisfaction scores within the electric industry, according to J.D. Power and Associates and the American Consumer Satisfaction Index.

- Co-ops **earned the top spot** in the J.D. Power and Associates 2017 Electric Utility Customer Satisfaction Study.
- Electric cooperatives, on average, **score three points higher** than all other energy utilities, according to the 2017 American Consumer Satisfaction Index.

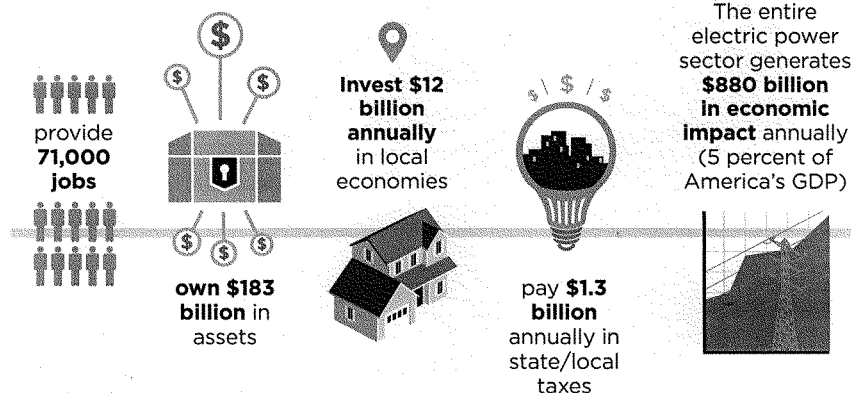
### Committed to serving the last mile

- Co-ops serve an average of **8 consumers per mile** of electric line; collect annual revenue of \$19,000 per mile of line.
- All other utilities average **32 customers** per mile of line; collect \$79,000 per mile.

### Electric cooperatives are guided by seven principles:

1. Voluntary and open membership
2. Democratic member control
3. Members' economic participation
4. Autonomy and independence
5. Education training and information
6. Cooperation among cooperatives
7. Concern for community

## Electric cooperatives are economic engines in their communities



For more information, visit: [www.electric.coop](http://www.electric.coop) | @NRECAnews

Mr. SHIMKUS. Thank you very much.

Now I would like to recognize Mr. Bruce Buckheit, and the title is analyst and consultant. Maybe I can have that title someday. That sounds pretty cool. Simple.

You're recognized for 5 minutes.

#### **STATEMENT OF BRUCE BUCKHEIT**

Mr. BUCKHEIT. Chairman Shimkus, Ranking Member Tonko, and distinguished members of the subcommittee. Yes, that's an easy title to come by when you work out of your house.

As Senior Counsel for the Department of Justice and then as Director of EPA's Air Enforcement Division, I've investigated and enforced and, most important, settled NSR cases starting in 1984 including leading the enforcement initiative against the coal-fired power plants for their NSR violations.

And so my view of the world is not the 50,000-foot high altitude overview. My experience is in the trenches, working with the plant managers and their counsel and others to parse the difference between these sort of theoretical arguments and the real world realities of what they need to do to keep their plants going and how these programs actually work on the ground.

And so that's my focus over the next couple of minutes is how do these things actually work on the ground. Before I go there, I just want to touch on one point and that is that Congress did intend in the 1977 amendments that over time, gradually, the existing sources that were grandfathered would lose that grandfathered status. They expected plants to modify and have to put on controls and that would end a competitive advantage that those old uncontrolled plants would have over new plants that have to spend hundreds of millions of dollars to put on controls and those controls add operating costs that continue thereafter.

So the overall intent was to level the playing field over time. Let me touch on some of these arguments that are floating at the 50,000-foot level that aren't true on the ground. First of all, it's been said that the NSR rules prevent operators from making repairs needed to improve safety. That is not true. Ongoing maintenance occurs all the time. There is no plant manager that I ever came in contact with who would tell you that he would defer a project needed for safety because of some potential Clean Air Act rule. The current rules actually encourage ongoing maintenance because if you let your plant decline hugely and then you do a project, you have a risk of liability. If you do your ongoing maintenance year in year out to maintain your plant in a good state, you don't trigger NSR.

The issues respecting the complexity in the NSR permitting process—first of all, NSR permitting for existing sources is extremely rare. Other than a handful of plant expansions in some industrial settings, these permits are simply not needed with any frequency and so don't pose a substantial burden. I am not aware of any power plant that has ever gone through an NSR permitting process, OK, for anything other than expanding the size of the unit. The reason for this is simple. If you don't increase emissions, you don't need an NSR permit. You have a number of other options rather than going through the full NSR permitting process. It in-

cludes incorporating a limit in your operating permit so that you do the project but your emissions are capped. You can also avoid NSR by decreasing emissions elsewhere in your facility to offset the emissions from the project. And thirdly, you can do incremental pollution controls, such as the use of slightly lower sulfur coal to offset any minor increases without having to go, you know, the route of the \$100 million pollution controls.

And further—last point here—is that if a project actually improves the efficiency of a unit, emissions go down. You burn less coal to make the same amount of electricity or the same number of widgets.

And so all of this focus on energy efficiency, I think, is overblown. With the power plants, the issue is life extension programs—programs where not routine maintenance but replacing large chunks of the plant—an equivalent to replacing the engine in the car, not just changing the spark plugs, and it was those sorts of projects and case law that stems from 1988 that got us at EPA involved in the forcing of these provisions.

Today, roughly, half of the existing coal-fired plants don't have state-of-the-art controls for  $\text{SO}_2$  and three-quarters of them don't have full controls for  $\text{NO}_x$ . This is the best most economic place to get your emissions reductions, not the small factories and not from individuals.

I see I am out of time so I will say thank you to the Chair.

[The prepared statement of Mr. Buckheit follows:]

**Testimony of Bruce C. Buckheit before the  
House Committee on Energy and Commerce  
Subcommittee on Environment**

**Hearing on  
Legislation Addressing  
New Source Review Permitting Reform  
May 16, 2018**

Chairman Shimkus, Ranking Member Tonko, and distinguished members of the Subcommittee, thank you very much for inviting me to participate in today's hearing. My name is Bruce C. Buckheit. I served in the Federal government's efforts in the management of environment and safety issues through the Administrations of Presidents Ford through George W. Bush. From 1984, when I filed my first action on behalf of EPA to enforce a New Source Review (NSR) violation until my retirement in 2003 I was directly involved in the administration and enforcement of the Clean Air Act, initially as a Senior Counsel in the Environmental Enforcement Section of the Department of Justice, then as Deputy Director and then Director of the Air Enforcement Division at the Environmental Protection Agency. Upon my retirement I served for four years as a member of the Virginia Air Pollution Control Board, which oversees the rulemaking, permitting and enforcement activities of the Virginia Department of Environmental Quality. I have also provided research and consulting services to a variety of corporations, state and Federal agencies, and non-governmental organizations, principally in the areas of energy and air pollution management in this country. In recent years I have also addressed such issues in a number of foreign countries including Armenia, the European Union, Israel, India, Indonesia, Kosovo, Myanmar, and Viet Nam. I appear today on my own behalf and without compensation.

In my judgment the discussion draft before the Committee today is not in the public

interest and should not be adopted. As I will explain in further detail below, the draft is not needed by the regulated community for any purpose and would not advance one of the fundamental purposes of the Clean Air Act – to eliminate, over time, the disparate treatment of new and existing sources. It would severely impair the ability of the modification rules to effect this purpose and would exacerbate the current barrier to investment in new manufacturing and electric generating facilities created by the difference in the treatment of new and existing facilities. Several of the provisions in the discussion draft pose significant policy issues and enforcement concerns including (1) the addition of the word “actual” in the revisions to sections 169(2) and 171(4) of the CAA; (2) the change in the baseline period for electric generating units; (3) the elimination of the annual emission increase test; (4) the “output” based test; (5) the “intent to restore, maintain or improve the reliability or safety of the source” test; (6) the safety valve for the “reliability” test and (7) the “savings provision” to ensure that there is no benefit to the environment from the draft.

In the course of preparing these remarks I reviewed some of the testimony presented at the February 14, 2018, hearing before this Committee. I will explain below why I disagree with a number of criticisms leveled at the current program during that hearing, specifically (1) the suggestion that the NSR program makes it difficult to maintain the reliability and safety of their facilities; (2) that only short term emissions of pollutants matter; (3) that “most of the things” required under NSR enforcement consent decrees are things the companies are required to do under other CAA programs anyway; (4) that over the past 15 years EPA enforcement officials have tried to expand the definition of modification; and (5) that companies are unable to determine whether a proposed modification will increase annual emissions and (6) that the NSR program, especially as it relates to modified facilities, is counterproductive and far less efficient

than other available CAA options.

#### **BRIEF HISTORY OF NSR AND NSR ENFORCEMENT**

The central legislative compromise of the 1967, 1970 and 1977 CAA amendments was an initial focus on new sources. This focus was based on the representation of industry advocates that one did not need to worry about existing sources, since they'd soon be retired, and so they were initially “grandfathered” out of an across the board obligation to install pollution controls. Thus, we have a program for “New Source Performance Standards”, but unlike the European Union and a number of other countries, Congress did not impose across-the-board emission limitations for large combustion plants.

While air pollution controls are highly effective in reducing health care and lost productivity costs, and add only minimally to consumers’ electric bills, Congress did recognize that these controls can add hundreds of millions of dollars to the cost of new large combustion plants such as power plants and aluminum smelters and impose operating costs that are not insignificant when a well-controlled facility is competing against a grandfathered, poorly-controlled factory. Understanding that this cost advantage would discourage investment in new factories and power plants that would have to use these controls, Congress adopted the NSR modification rules that are at issue today *intending that these rules would, over time, require that existing sources add modern pollution controls*. The D.C. Circuit recognized this policy choice out 30 years ago in the Alabama Power case,

“[t]he statutory scheme intends to ‘grandfather’ existing industries; but the provisions concerning modifications indicate that this is not to constitute a perpetual immunity from all standards under the PSD program.”

In seeking a middle ground between perpetual immunity and immediate upgrading of all existing major sources, Congress could have considered a number of different options, including



the age of the unit (as several Canadian states and the EU have done). But, in the 1970s industry argued that, as an environmental program, the test should be whether there is an emissions increase. And now, having benefited for several decades from the exemption they sought, some in industry want to renegotiate the deal.

During my Federal service NSR enforcement actions were relatively rare. Enforcing these rules require a significant amount of information and resources, but, within stationary sources (as distinct from mobile sources), these violations lead to the greatest environmental harm – and so, where detected, are a priority. If a source exceeds an emission limit by 10 percent 800 hours per year, the excess emissions associated with the violation are less than one-percent of the source's permitted emissions. In contrast, enforcing compliance with NSR rules leads to emission reductions of up to 90-98 percent per year, (depending on the effectiveness of the controls for the pollutant at issue) each year thereafter. EPA has encountered several instances where there were sector-wide, gross violations of the NSR rules. And, in my experience, it is these enforcement actions, not the general experience of those who have complied, that have generated the hostility towards the NSR program that has been expressed to you.

In the wood products sector several dozen new factories were built by Louisiana-Pacific, Georgia Pacific and Weyerhaeuser on the assertion that no pollution would be emitted by those facilities. EPA's first knowledge of the existence of such facilities came when an EPA permit writer, on a back country vacation came around a bend in a stream and saw a facility which he would have been responsible for. In the refinery sector, there was a period where refining capacity had increased by fifty percent, even though the number of refineries had not changed. EPA enforcement's initial information on these plant expansions came about through reading

back issues of “The Oil and Gas Journal.” The first information about the potential for large modifications at utilities came via an article in the Washington Post about how the process at the time of deregulating the power sector was prompting a resurgence in the use of coal-fired power plants. In each of these instances, significant investigative resources and extensive negotiations (at times after protracted litigation) were required to fully document the violations and subsequently compel the companies to comply with these rules. Since my retirement, EPA/DOJ has completed an additional sector wide enforcement effort involving the carbon black manufacturing sector.

Anticipating a large expansion in nuclear generation, operators of coal-fired power plants let existing units decline to the point where large component failures and lengthy forced outages became more common. Subsequently, when it became apparent that nuclear generation would not take over the sector, a number of companies went about what the industry termed “life extension programs”, where major components costing tens of millions of dollars were replaced *in toto*, adding decades to the life expectancy of these units – and increasing annual emissions by thousands of tons per year. Rather than adding pollution controls as they refurbished and upgraded these old units with wholly new components – the analogy is replacing the engine in a car rather than the spark plugs and air filter - many in the sector simply got lazy and relied on an interpretation of the rules -- “the routine maintenance” exemption – promoted by several Washington-based law/lobbying firms. They did so even though there was clear precedent, commencing with EPA Administrator Reilly’s interpretation under President George H.W. Bush Administration and the ensuing litigation in the WEPCO case, warning that the “routine maintenance” exemption was indeed limited to routine maintenance and not these large capital projects.

Power plants have an engineering useful life of 30-40 years, but their economic useful life may be longer. The vast majority of our coal-fired power plants were built before 1972 and so many are nearing at the end of their useful lives, unless they now undertake substantial, capital intensive, life extension programs. Ironically, the industry's unwillingness to comply with the modification rules (and EPA's inability or unwillingness to enforce them) - or retire - discouraged construction of new coal-fired power plants in the 1980-2010 time frame, when new coal-fired plants could have competed with natural gas fired units or renewables. Today's discussion draft is intended to largely, but not completely, reverse the 1988 WEPCO decision and allow these life extension programs to proceed, even where they increase annual emissions by thousands of tons per year. This would severely undermine earlier Congressional policy to gradually limit the competitive advantage that large polluters have over clean factories.

The NSR process is simply this -- you can modify your plant however you wish - without going through NSR permitting -- if you don't increase annual emissions by more than a nominal amount. There are many options for doing this -- one is to simply take an annual limitation on emissions that is only slightly above your highest emission rate in recent years. If the source operator wants make a modification that is going to increase emissions by 10 percent but does not want to constrain production, it can add some incremental pollution controls, such as low NOx burners or commit to use a slightly cleaner fuel such as natural gas or lower sulfur coal. Of course, the source also has the option to do the unthinkable and simply add modern controls as Congress intended. And so, while compliance, with some planning, is normally relatively modest, the consequence of a violation is not. Under the CAA, if a source makes a "major modification", "grandfathering" under the original legislative compromise is over and the source is treated as a new source. That means retrofitting with today's state of the art

controls. In the past, enforcing this obligation reduces SO<sub>2</sub> and NO<sub>x</sub> emissions by millions of tons per year.

Maintaining the ability to enforce these obligations against the power sector is both good environmental policy and good economic policy. State and local air pollution control agencies need to find emission reductions to meet health based air quality standards, but utilities often can generate substantial political pressure in a state. Emission reductions from coal-fired EGUs are far, far cheaper than trying to get them from smaller businesses or individuals. And, unlike manufacturing, you can't "offshore" production of electricity. Approximately half of the existing coal-fired units do not have state of the art controls for SO<sub>2</sub> (FGD) and three-fourths of such units do not have the full suite of modern controls for oxides of nitrogen (NO<sub>x</sub>, SCR). There are a number of coal-fired power plants with extremely high emission rates that will effectively be exempted from these requirements per the discussion draft.

#### **CONCERNS ABOUT SPECIFIC PROVISIONS IN THE DISCUSSION DRAFT**

##### **1. The addition of the word "actual" in the proposed revisions to sections 169(2) and 171(4) of the CAA.**

The NSR program is a pre-construction program. Sources are currently expected to determine *in advance of commencing construction of the project* whether the project will need to undergo PSD review and install advanced pollution controls. Accordingly, the source and the permitting authority must each know (1) the baseline – *i.e.*, the emissions before the project and the post-project emissions and (2) the post-project emissions. At one point in time the post-project emissions were the "potential to emit"; *i.e.*, the maximum post-project emissions. For utilities, the WEPCO rule establishes a procedure for utilities that do not expect to run all of the time where, prior to commencement of the project the source would project future emissions. This test is known as the actual-to-projected-future-actual test and allows the utility to estimate

future emissions based, among other things, any increase in utilization that the project will allow. Some industry advocates have over the years pushed for a relaxation of this test so that NSR is only triggered if there is an actual increase in emissions in the first few years. This concept is unworkable for several reasons. A source can escape the obligation to install and thereafter operate pollution controls for decades thereafter merely by keeping emissions below the applicable threshold for a few years and thereafter increase emissions in an unlimited fashion. This, in itself is inconsistent with the notion of the modification rule being a rational way to gradually end grandfathering of poorly controlled plants.

This notion also reduces the ability of authorities to enforce the program and encourages gaming of the system. There is no way for regulators to contest, at the time of a project, a claim that actual emissions will not increase. Emission testing of sources is not conducted sufficiently frequently to allow authorities to know of an increase in emissions. I've recently reviewed the permitting file for a particular plant – prior to the entry of an EPA/DOJ consent decree a few years ago measurement of PM emissions from that plant had occurred only twice in 25 years – even though several large modifications had been undertaken. And since there would be no obligation to seek a permit at the time of the modification, authorities may not be able to tie an increase in emissions to a specific activity. Finally, Federal law in this area provides for a general five year statute of limitations for penalties for civil violations and several circuits have held that this limit applies to injunctive relief as well as civil penalties. In those circuits, if authorities do not bring an enforcement action within 5 years of when they “knew or should have known” of the violation, the source cannot be required to comply. Based on my experience as an enforcement manager, one cannot readily dismiss the possibility that some sources may file seemingly innocuous disclosures at random points in time to unsuspecting permitting authorities

to establish that the government “should have known” of the increase in emissions even though there has been no emission testing.

**2. The proposed change in the baseline period for electric generating units.**

In determining whether a contemplated project will increase annual emissions source operators and regulators need to have a common understanding of what the emissions of the plant were just before commencement of the project. Initially, this was determined by looking at emissions for the two years immediately prior to commencement of the project. Then, EPA adopted a test for utilities emissions during the highest two years in the last five years and subsequently, for other sources, the baseline period is the highest year in the last ten years. This latter decision was based on an argument that non-utilities needed a longer look back period because of swings in the business cycle. Now, the discussion draft proposed to extend this dubious option to utilities. There is no particular argument to support the notions of large decadal swings in electric demand. Indeed, the data show a long, gradual decline in demand. Further, the rules provide that any increase in emissions that is associated solely with an increase in demand for the product (including electricity) that could have been accommodated before the project does not trigger the NSR obligation. The sole purpose of the proposed change in baseline is to allow for a greater increase in emissions *occasioned by the project* than would otherwise be allowed.

**3. The proposed elimination of the annual emission increase test.**

The elimination of the annual emission increase test will effectively shield old-coal fired power plants from most liability under the NSR rules and undercut the notion of a gradual phase out of old units. Here it should be noted that while, in today’s market current coal-fired plants are highly challenged to remain competitive against natural gas-fired and renewable generation, they are also competing against other coal-fired plants for whatever market share is available to

coal generation. The proposed elimination of the annual increase test will continue to disadvantage well controlled coal-fired units in competition with poorly controlled plants for decades to come. Where power plants are regularly maintained, the annual increase test, which includes the demand growth exception discussed above, does not create a burden for utilities. But, when those plants are “shot” and are engaged in major capital investments to extend their useful life for decades, it is time for them to include modern controls in the program.

#### **4. The proposed “output” based test.**

The proposed “output” based test necessarily includes elimination of the annual increase test and for that reason should not be adopted. It is also unnecessary. If a project merely increases the efficiency of a unit, the annual “input-based” emission rate will go down just as the “output- based” emission rate declines. If a modification allows a plant to make the same amount of electricity while burning less coal, the SO<sub>2</sub>, NO<sub>x</sub> and other pollutant emission rates will go down, not up. The discussion draft provides an option to increase the size of the unit (and associated hourly and annual emissions), recover lost utilization, and extend its useful life for decades, without adding modern controls as long as the output based emission rate *for any pollutant* declines. While it is not clear that the drafters intend that a minor decrease in, for example CO or CO<sub>2</sub> emissions per MWh, would allow unlimited increases in other pollutants, this appears to be allowed by the language of the discussion draft. Some advocates have in other settings put forth the “poster child” of one form of efficiency improvement – a particular design of turbine blade upgrade, where the major effect is to increase the power of the unit, along with an efficiency improvement, such that both hourly and annual emissions may increase. This particular design is not the only option for turbine upgrades, but those who want to employ it need only manage emissions by nominal upgrades to pollution controls or --- by fully controlling

their plants as initially intended by Congress. It should also be noted that in the utility enforcement actions some attempted to argue that simply putting in new economizers, boiler walls and other components of the original design would improve efficiency. On careful examination it was determined (and accepted by the courts) that this increase would only be true while those components were new and clean and that the benefit would decline after a relatively short period of operation.

**5. The “intent to restore, maintain or improve the reliability or safety of the source” test.**

For most sources subject to the NSR requirements an “intent of the operator” test is unenforceable. A refiner who adds 5 percent capacity may claim that the overall intent of the project was to improve reliability and safety, and the added capacity was incidental. Such a claim would be difficult, if not impossible, to determine objectively and certainly could not be ascertained without highly intrusive investigations. For utilities, the reason they engage in life extension programs is **to restore, maintain or improve the reliability or safety of the source.** And so, this provision, as most of the discussion draft, is not a clarification of the modification rule, but a straightforward elimination of those parts of the modification rule that are most likely to impact aged and poorly controlled coal-fired power plants.

**6. The proposed safety valve for the proposed “reliability” test.**

The discussion draft offers a proposed safety valve that would impose liability for a change that would otherwise be exempt because (1) it reduced the output-based emission rate of any air pollutant or (2) did not increase hourly emissions above the 10 year baseline *if the Administrator determines that such increase harmful to human health or the environment and that the change is not environmentally beneficial.* I cannot see how this provision would be of any significant practical utility. As drafted, the safety-valve provision refers to “such increase”



and does not directly refer to the output-based exemption. More importantly, this provision would seem to be unenforceable since a source would not know that its modification was subject to the NSR provision until after the “violation” had occurred. Further, the language of the safety valve – “harmful to human health or the environment” **AND** (not or) “that the change is not environmentally beneficial” is extremely vague, leaving the ultimate test for this retroactive liability in the Administrator’s unfettered discretion. Note that the source would be exempt even though the Administrator determined that the modification is “not environmentally beneficial”, as long as the Administrator did not also determine that the modification is “harmful to human health and the environment.” One can imagine a scenario where, in some Administrations, all such changes would be exempt, while in another, no changes would be exempt.

**7. The “savings provision” to ensure that there is no benefit to the environment from the discussion draft.**

To ensure that there are only “winners” and no “losers” within the regulated community, the discussion draft provides a “rule of construction” that provides that the discussion draft does not accidentally create any additional liability for modifications. Thus, there can be no suggestion that, in “clarifying” the modification rule, the environmental benefits of the existing Clean Air Act are preserved.

**RESPONSE TO CERTAIN COMMENTS RAISED DURING THE FEBRUARY 14, 2018 HEARING**

**1. The NSR program makes it difficult to maintain the reliability and safety of their facilities.**

The NSR process has never been intended or enforced so as to interfere with true “routine maintenance” or with the ability of a facility to respond to increases in demand for its product that could have been accommodated without the modification. As expressed earlier an operator can modify its plant however it wishes, if it pays modest attention to the actual rules and avoids

risky legal theories. Most manufacturing sectors maintain high unit availability on a constant basis, and so, as a practical matter, compliance for these sources is simply a matter of not increasing capacity – or offsetting emissions elsewhere at your facility if you decide to increase the capacity (and associated emissions) of an individual unit. For a power plant, liability generally only arises if the operator **fails** to maintain the reliability of the unit over time. In either case, if the source operator wants make a modification that is going to increase emissions by 10 percent without constraining production, it can add some incremental pollution controls, such as low NOx burners or commit to use a slightly cleaner fuel such as natural gas or lower sulfur coal.

**2. Only short term emission rates matter.** PM<sub>2.5</sub> is the pollutant that creates the greatest public health risk and the greatest impacts from PM<sub>2.5</sub> are associated with *chronic, long term exposure* to PM<sub>2.5</sub>. This pollutant is generated by direct emissions of very fine particulate matter and from secondary atmospheric reaction of SO<sub>2</sub> and NOx emissions. We do not even aspire to meet levels for *annual* PM<sub>2.5</sub> recommended by the World Health Organization and much of the population of this country lives in areas that do not meet the *annual* PM<sub>2.5</sub> standard that we have adopted.

**3. “Most of the things” required under NSR enforcement consent decrees are things the companies are required to do under other CAA programs anyway.**

I was in the negotiating room for many of the NSR consent decrees and can affirm that this is simply not correct. However, if it were true, there would then be no basis for the myriad other complaints lodged against the NSR program. If these companies were going to "put on these controls anyway" why didn't they just sign up to put on the controls when they were rebuilding their units and avoid all of the expense and irritation of litigation? And what would be the harm of continuing the program as it is?

Where there are upcoming regulatory programs that will require power plants to add pollution controls at the same time NSR enforcement proceedings are underway (often years after the modification), there may be some overlap, but this is not a bad outcome and, in fact, is routinely relied upon by the EPA air program office in developing and evaluating new programs. For example, in evaluating the potential cost for the Mercury and Air Toxics rule (MATS), the air program office included the NSR consent decrees in the “base case”, thereby reducing the projected cost of that rule. Compliance with the MATS rule at certain plants was also facilitated by other EPA rules, including NSPS standards, dating back to 1979.

The NSR Consent Decrees are generally more stringent than the MATS rule and so, complying with the Decrees enabled those sources to meet the MATS rule with only minimal additional expenditures. However, those same sources could have complied with the MATS rule with far less protective measures than required by the NSR Consent Decrees.

Further, there are going to be periods where ongoing enforcement activities are not accompanied with new environmental regulation and there have been numerous NSR enforcement actions in other sectors where there were no upcoming additional regulations. Finally, I would note that the NSR consent decrees include provisions, often included at the request of the air program, that advance the overall objectives of that program. These include the adoption, for the first time in a given sector, of advanced pollution control technologies such as regenerative thermal oxidation (RTO) in the wood products sector, SCR and PM CEMs in the utility sector and advances in controls for fluidized catalytic cracking units (FCCU) and boilers and heaters in the refinery sector. These requirements were strongly opposed by settling companies, but paved the way for the air program office to incorporate these advances more broadly in subsequent rulemakings. It should also be noted that the NSR Consent Decrees

include provisions for surrender of allowances under the Acid Rain trading program so that, contrary to what had been represented to the Committee, the emission reductions from the NSR Consent Decrees do not "pop up" as additional allowable emissions from other facilities.

**4. Over the past 15 years EPA enforcement officials have tried to expand the definition of modification.**

There were no novel theories involved in the wood products and refinery NSR enforcement actions. These were straightforward matters. In the wood products cases new green field plants were constructed without permits or modern controls. In the refinery cases the capacity, hourly emissions and annual emissions of the plants increased and there were no issues of "routine maintenance." At the time of our initial filing of the early utility NSR cases, we asked ourselves whether we needed to file a test case in advance of the first wave of cases and decided that we would rely on the earlier WEPCO decision. I've not reviewed the briefs filed by DOJ over time, but I have had occasion recently to review one of the more recent judicial decisions concerning the "routine maintenance issue." In that decision the government made a slightly different argument than I recalled, but the Court relied on the WEPCO decision and the early decisions in our initiative that also relied on WEPCO. And so, irrespective of how DOJ or EPA may have attempted to argue the particular point the law as applied to utilities is as it was 15 years ago.

**5. Companies are unable to determine whether a proposed modification will increase annual emissions.**

I find this argument perhaps the least credible of any presented by the opponents of the NSR program. In the course of our investigations, we obtained the procurement documents where plant managers justified the expense of the proposed modifications. In those documents company officials set out data showing how many operating hours (and how much revenue) was being lost due to forced outages of specific components of the plant. They then forecast the

degree to which those forced outages would be reduced and the additional operating hours (and revenue) that would be realized by the proposed project. Such projects would only be approved where the increased revenues associated with the increased annual hours of operation were sufficient to pay for the investment in a relatively short period of time. Since we and they know the hourly emission rate of the unit, those internal company projections formed the basis of our proof of the violations and document that companies can and do know whether a project will increase annual emissions.

**6. The NSR program is the least successful and most counterproductive of all the Clean Air Act programs. The benefits achieved by the NSR program can be preserved by relying on more effective CAA programs that regulate the same pollutants from the same facilities.**

The NSR program has clearly not achieved the goal of leveling the playing field between “new” and “grandfathered” large sources over any reasonable timeframe. But that is an argument to strengthen, not weaken, the program. NSR permitting has replaced the NSPS program as the driver for better controls for new facilities; the latter program serves only as the “floor” for NSR limits for new sources. Through NSR and, in particular NSR enforcement at violating facilities new technologies, such as SCR, RTO and PM CEMS have been introduced into the toolbox for state and local permitting authorities. I know of no CAA program that regulates all of the same pollutants from the same facilities as are subject to the current NSR rules.

Within my community the lead phase-down program – an old “command and control” program is widely regarded as the most successful CAA program. While we have made substantial progress in reducing ambient concentrations of certain pollutants, we still have significant issues in several areas – notably PM<sub>2.5</sub> and ozone. After modest reductions for several decades, ozone levels are essentially unchanged over the past decade.

One can offer critiques of many of the other CAA programs. The SIP process has proven to be exceedingly slow, ineffective and politically charged; NSPS standards are woefully out of date; MACT standards are generally toothless, designed not to force all facilities to actually meet the level of the top 12 percent, but merely to force some reduction from the worst emitters, the Acid Rain Program was a one-shot effort that did not completely address the acid deposition issue, particularly in the Appalachian region and so on. But each of these programs moved the ball forward, so too, the NSR program is flawed as it is so easily evaded. Fifteen years ago I suggested a “birthday” provision, where a plant operator would have to make a decision as to whether to retire or control a facility on its 50<sup>th</sup> anniversary (or the 50<sup>th</sup> anniversary of the Clean Air Act). I suggest that one appropriate “reform” for the NSR modification rule is to create such an age test – a date by which certain very large emitters (similar to the EU’s group of large combustion plants) must meet some level of additional control for key pollutants. Such an option would provide greater certainty to facility operators and provide a clearer path to eliminating one barrier to investments in new manufacturing facilities in this country.

#### **BACKGROUND AND QUALIFICATIONS**

I received a B.S. (Physics) from Manhattan College in 1969, a M.S. (Physics) from the College of William and Mary in 1971 and a J.D. (Law) from the College of William and Mary in 1974. From 1971 to 1974 I was employed at the Naval Logistics Engineering Center where, along with other engineering and testing matters, I researched seaborne solid waste disposal issues and potential solutions for the U.S. Navy. From 1974 until my retirement in 2003, I was employed by the Federal government in the administration or enforcement of Federal laws relating to the environment and safety. This service began in the Office of Chief Counsel with the National Highway Traffic Safety Administration (NHTSA), where I was responsible for a time with ensuring the agency's compliance with environmental matters and later investigated and prosecuted a number of substantial safety defect matters

In 1984 I transferred to the Environmental Enforcement Section of the Department of Justice (DOJ) and served in several positions, culminating as Senior Counsel. While at the DOJ, I served as lead counsel in a number of significant environmental cases, including Conservation Chemical (CERCLA), Marine Shale Processors (RCRA, CWA, CAA); Metro-Denver, St. Louis MSD and the Ocean Dumping cases (CWA) and the Louisiana- Pacific, General Motors, Bethlehem Steel and Kobe Steel cases (CAA). During this period I prosecuted a number of violations of the New Source Review provisions of the CAA and specialized in other highly technical cases, such as the GM "defeat device" matter. From August, 1996 to December, 2003, I was Deputy Director and then Director of the Air Enforcement Division in EPA's Office of Enforcement and Compliance Assurance. The Air Enforcement Division is comprised of a mix of attorneys, engineers and scientists and is responsible for major case development and prosecution as well as policy development and national program management respecting stationary sources regulated under the CAA. The Division is also directly responsible for mobile source and clean fuels enforcement under the CAA.

During my tenure at DOJ and EPA, I worked closely with the EPA Office of General Counsel, the EPA program offices responsible for developing regulations to implement the several regulatory programs of the Clean Air Act and with the Regional EPA offices responsible for day-to-day State Implementation Plan<sup>1</sup> (SIP) approval and enforcement activities. Based on information developed during serial investigations of PSD/NSR violations within the wood products industry that occurred while I was at DOJ, I instituted what we termed "investigations-based" enforcement at EPA, focused on environmentally significant violations to supplement the traditional "inspection-based" enforcement model. Investigations using this new approach were more technical and far more time-consuming than traditional inspections, but revealed widespread noncompliance with the NSR provisions of the CAA within the coal-fired utility, refining and pulp and paper sectors. Since the unlawful emissions and political issues associated with the PSD/NSR violations within the utility sector were so significant, I was directed by my superiors to personally manage the national investigations in the utility sector. Accordingly, I managed the development of the initial round of cases referred to DOJ for prosecution and the development of the EPA administrative action against the Tennessee Valley Authority (TVA). I

also managed EPA's involvement in settlement discussions<sup>1</sup> with a number of utilities, including Tampa Electric Company (TECO), Southern Indiana Gas and Electric Company (SIGECO), Virginia Electric Power Company (Dominion), Duke Power, Southern Company, TVA, and PSEG aimed at resolving these longstanding violations and personally attended many of those discussions. These discussions included issues respecting feasibility of construction schedules, potential performance of pollution control devices and cash flow and affordability issues.

Since my retirement from Federal service, I have occasionally been retained by business, states and environmental groups to provide advice, analysis or testimony on a variety of environmental matters. As relevant to this matter, I was retained by the National Association of Clean Air Administrators (NACAA), the professional association of state and local air regulators) to develop a model rule to assist state and local permitting authorities to develop "case-by-case" MACT limits for industrial, commercial and institutional boilers (ICI Boilers).<sup>2</sup> I have also been retained to review and develop comments on EPA's several rulemakings associated with development of the Mercury and Air Toxics Standards that are relevant to this matter. This effort included a detailed evaluation of EPA's MACT floor determinations, compliance demonstration procedures and overall regulatory structure and impact. I have also been retained by various clients to evaluate energy and energy policy issues, particularly those involving the development and control of new and existing coal-fired power plants in the European Union, Kosovo, Armenia, Myanmar, Viet Nam, Indonesia, India and Japan.

From 2006 to 2010, I served on the Virginia Air Pollution Control Board ("VAPCB"). The VAPCB is a statutory non-salaried citizen board that has the authority to conduct research into the causes and effects of air pollution, adopt regulations to prevent or control air pollution, and issue permits and enforcement orders to implement and enforce air pollution regulations and the Virginia air pollution control law. During this time a permit to construct what is today one of the last coal-fired power plants in the U.S. came before the VAPCB. I researched applicable BACT and case-by-case MACT requirements, leading the Board to adopt stringent, but

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<sup>1</sup> Not all of these discussions led to settlements prior to my retirement.

<sup>2</sup> Where EPA fails to meet a statutory deadline for issuance of a National Emission Standard for Hazardous Air Pollutants (NESHAP) pursuant to section 112 of the CAA for a sector, states are required to develop limits for covered sources on a case-by-case basis. The model rule set out relevant statutory guidance and data that allowed states to meet this obligation.



achievable SO<sub>2</sub> and mercury emission limits<sup>3</sup> for that plant.

Thank you for the opportunity to appear before the Subcommittee. I hope my testimony will be helpful to you as you review the New Source Review program and decide whether Congress should take action to modify it. Please do not hesitate to have your staff contact me if you need additional information.

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<sup>3</sup> The operator has consistently demonstrated compliance with the more stringent limits.

## SUMMARY OF TESTIMONY OF BRUCE C. BUCKHEIT

In my judgment the discussion draft before the Committee today is not in the public interest and should not be adopted. The draft is not needed by the regulated community and would not advance one of the fundamental purposes of the Clean Air Act – to eliminate, over time, the disparate treatment of new and existing sources. It would severely impair the ability of the modification provisions of the Act to effect this purpose and would exacerbate the current barrier to investment in new manufacturing and electric generating facilities created by the difference in the treatment of new and existing facilities. Several of the provisions in the discussion draft pose significant policy issues and enforcement concerns, including (1) the addition of the word “actual” in the proposed revisions to sections 169(2) and 171(4) of the CAA; (2) the change in the baseline period for electric generating units; (3) the elimination of the annual increase test; (4) the “output” based test; (5) the “intent to restore, maintain or improve the reliability or safety of the source” test; (6) the safety valve for the “reliability” test and (7) the “savings provision” to ensure that there is no benefit to the environment from the draft.

I disagree with criticisms leveled at the NSR program during the February 14, 2018, hearing that (1) the NSR program makes it difficult to maintain the reliability and safety of facilities; (2) only short term emission rates matter; (3) “most of the things” required under NSR consent decrees are things companies are required to do under other CAA programs anyway; (4) over the past 15 years EPA enforcement officials have tried to expand the definition of modification; (5) companies are unable to determine whether a proposed modification will increase annual emissions and (6) that the NSR program, especially as it relates to modified facilities, is counterproductive and far less efficient than other available CAA options.

Mr. SHIMKUS. Thank you very much.

And then I will turn to Mr. Jeffrey Holmstead, partner of Bracewell LLP—testified numerous times before this committee—recognized for 5 minutes.

#### STATEMENT OF JEFFREY HOLMSTEAD

Mr. HOLMSTEAD. Thank you very much for giving me the chance to be here today. I hope, during the questions, I can maybe address a couple of things.

Where I don't necessarily agree with my friend, Bruce, and explained why—and EPA's theory by which they prevent energy efficiency projects and a rather strange theory about how you calculate emissions increases, but I want to focus on something different during my oral statement. I just have a minute.

Look, we are talking about just one of the many programs that regulate emissions from manufacturing plants and power plants. New Source Review, and despite the name we are not talking about how it applies to new sources. We are only talking about how it applies to existing sources.

In their testimony, Mr. Buckheit and Mr. Baldauf both focused primarily on power plants and how they believe the NSR program should work to reduce SO<sub>2</sub> and NO<sub>x</sub> emissions from these plants.

The problem is that the NSR program has been in place for more than 40 years and it has never worked that way. As Bruce said, very few power plants—in fact, unless they expand their capacity, they don't voluntarily go through NSR and even if the program worked the way that they want it to, you would not get overall reductions in power emissions because we have cap and trade programs in place. So if one facility goes through NSR and installs controls, that doesn't reduce the total number of allowances that plants are allowed to emit.

You might be surprised to hear that there are actually 14 different Clean Air Act programs that regulate these very same emissions that we are talking about—SO<sub>2</sub> and NO<sub>x</sub> emissions from power plants. Thankfully, although the NSR program has essentially done very little to reduce emissions from these plants, other programs have been very effective.

My friend Bruce, Mr. Baldauf, did not discuss any of these other 14 programs. Based on their testimony, you might be left with the misimpression that the NSR program is the only way to require power plants to reduce their emissions. They appear to believe that if we just leave the NSR program alone, all power plants will be forced to install what Mr. Buckheit calls the full modern suite of controls that he would like them to have.

So even though all these plants have been covered by the NSR program for decades, in some cases more than 40 years, we just need to give the NSR program a little more time.

But when Congress passed the 1990 Clean Air Act amendments, it gave EPA much more effective programs that were specifically designed to reduce emissions from power plants and these programs have been remarkably effective.

One of these programs, the acid rain program, as some of you remember, was the centerpiece of the 1990 amendments. It was specifically designed to reduce SO<sub>2</sub> and NO<sub>x</sub> emissions from power

plants and it seems odd that if Congress expected the NSR program would force all those plants to install emission controls, it seems odd that it would have spent so much time and effort developing the acid rain program.

Here are just a few things that I hope you will keep in mind. The Clean Air Act was passed in 1970. The NSR program came into place a few years later. Between 1970 and 1990 when the amendments were passed, SO<sub>2</sub> emissions from U.S. power plants decreased by about 9 percent. NO<sub>x</sub>, during that same period when they were covered by NSR and only NSR, NO<sub>x</sub> emissions actually increased by 30 percent.

Now, since 1990 when Congress passed the acid rain program to reduce emissions from power plants and also gave EPA authority to impose other cap and trade programs when further reductions were needed, here is what has happened. Since 1990, SO<sub>2</sub> emissions from power plants have been reduced by more than 92 percent—more than 92 percent from almost 15—almost 16 million tons to 1.3 million tons. Since 1990, NO<sub>x</sub> emissions from power plants have fallen by about 83 percent. What regulatory programs have been responsible for these reductions?

Well, according to EPA's own analysis, it's not the NSR program. EPA itself says that these reductions have come because of a series of cap and trade programs, and I don't have time to go through them but there's been four that have been put in place by successive administrations, a Democrat and Republican. The NSR program does make it harder and more expensive for facilities to maintain their plants and make them more efficient. The NSR program is long and can often be very costly. I know of several companies that have teams of engineers and lawyers who devote their time to figuring out how they can maintain their plants without triggering NSR.

I have sat in rooms where companies have evaluated projects that would make their plants more efficient and then decided not to do them because of concerns that they would trigger NSR.

Look, these policies are very complicated and I am grateful that we are having this discussion. I sincerely hope that this committee will show that Republicans and Democrats can work together to remove unnecessary regulatory burdens.

The bill being considered today would do just that and I hope that you will give it serious consideration.

Thank you.

[The prepared statement of Mr. Holmstead follows:]

**Testimony of Jeffrey R. Homestead  
before the  
House Committee on Energy and Commerce  
Subcommittee on Environment**

**Hearing on  
Legislation Addressing New Source Review Permitting Reform  
May 16, 2018**

Chairman Shimkus, Ranking Member Tonko, and distinguished members of the Subcommittee, thank you very much for inviting me to participate in today's hearing. My name is Jeff Holmstead. I am a partner in the law firm of Bracewell LLP and have been the head of the firm's Environmental Strategies Group (ESG) since 2006.

For almost 30 years, my professional career has been focused on policy, regulatory, and legal issues arising under the Clean Air Act. From 1989 to 1993, I served in the White House Counsel's Office as Associate Counsel to President George H.W. Bush. In that capacity I was involved in many of the discussions and debates that led to the passage of the 1990 Amendments to the Clean Air Act – and was then deeply involved in the initial efforts to implement the 1990 Amendments. From 2001 to 2005, I was the Assistant Administrator of EPA for Air and Radiation and headed the EPA Office in charge of implementing the Clean Air Act. I am well acquainted with the legal, policy, and practical issues associated with the Clean Air Act and the many regulatory and permitting programs that have been designed to protect and improve air quality in the U.S.

When not in the federal government, I have been an attorney in private practice, representing a wide variety of clients on Clean Air Act (CAA) and other environmental issues. Since I joined Bracewell in 2006, I have worked primarily with companies and trade groups in the energy and manufacturing sectors. Today, however, I am not appearing on behalf of my firm or any of my clients, and I have not submitted my testimony to anyone else for their review or approval. Instead, I speak as someone who has worked on CAA issues for many years – as a policymaker, a regulator, and an attorney in private practice representing companies who are trying to manufacture products or develop energy resources in the U.S. in an environmentally responsible manner.

Based on my experience at EPA and in the private sector, I can say that the CAA's New Source Review (NSR) program is badly in need of reform. In terms of reducing unnecessary and unwarranted regulatory burdens, the draft legislation being discussed today to amend the NSR program would easily be the most important CAA reform ever adopted by Congress.

Over the years, the NSR program has become a complicated mess that makes it more difficult for companies to do things that we should all want them to do – like maintaining the reliability and safety of their facilities and making them more efficient. In some parts of the country, it

effectively bans the construction of new facilities even if they use state-of-the-art pollution controls and would not have a meaningful impact on the environment – and even if the communities where they would be located desperately want them to be built.

It is certainly true that the NSR program does result in environmental benefits, especially as it applies to new facilities. But these benefits can be preserved by reforming NSR in a thoughtful way that would provide regulatory certainty and dramatically reduce the burden that it imposes on U.S. businesses and workers.

### **Background**

The Clean Air Act has been a remarkable success. Since it was adopted in 1970 – and especially since the passage of the 1990 Amendments – air quality has dramatically improved in virtually every part of the country. Since 1970, emissions of the six common pollutants that EPA has targeted for reduction – particles (generally called particulate matter or PM), ozone, lead, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>) and sulfur dioxide (SO<sub>2</sub>) – have dropped by more than 70 percent while gross domestic product has grown more than 250 percent.

More importantly, the emissions reductions have dramatically improved the quality of the air that we breathe. Between 1990 (when the current CAA was put in place) and 2015, national concentrations of air pollutants improved 85 percent for lead, 84 percent for CO, 67 percent for SO<sub>2</sub>, and 60 percent for NO<sub>2</sub>.

Most important of all have been the recent reductions in concentrations of fine particles (PM<sub>2.5</sub>), which EPA and many outside researchers have identified as representing the greatest risk to public health of all pollutants. Just since 2000, shortly after EPA began to regulate fine particles, daily average concentrations of fine particles have improved by more than 40 percent nationwide.

However, these very substantial emission reductions and improvements in air quality do not mean that everything about the Clean Air Act is working well. The CAA created dozens of different regulatory programs, and, using the authority of the CAA, EPA has issued hundreds of different regulations. Since 1990, when Congress last amended the CAA in a meaningful way, we have learned a great deal about regulatory policy. We now understand that some CAA programs are very effective and others are not. Some programs actually create unforeseen problems that make them counterproductive.

Because the CAA and regulations issued under the CAA have been developed over time, there are often several different regulations that apply to the same pollutants from the same facilities. Some of these programs have been very successful at reducing pollution and improving air quality cost-effectively – like the acid rain program and the various cap-and-trade programs around the country that have been modeled on it. Yet there are other CAA programs that target the same pollutants from the same facilities and impose significant costs with little benefit. Because there are so many overlapping programs, we, as a society, are paying much more than we should for preserving and improving air quality. If we take advantage of the lessons that have been learned over the last 30 years and use the most effective and efficient approaches for reducing air pollution, we can achieve our air quality goals at a much lower cost.

As noted above, I have spent almost 30 years working on and studying the various regulatory programs created under the Clean Air Act. I can say with confidence that the NSR program, as it applies to existing facilities, is the least successful and most counterproductive of the many programs created by the Clean Air Act. To the extent that it provides environmental benefits, those same benefits can be preserved by reforming the program in a thoughtful way and by relying on other, much more effective CAA programs that regulate the same pollutants from the same facilities.

#### **Inaccurate Claims Made by Proponents of Current NSR Program**

Proponents of the current NSR program like to point to settlements (usually in the form of consent decrees) that have been reached over the years in a number of NSR enforcement cases. They argue that the current program should remain unchanged so that EPA enforcement officials can bring more NSR cases.

If you take the claims made in government press releases at face value, you might think that these NSR settlements have achieved large reductions in air pollution – especially from coal-fired power plants. But if you look carefully at the terms of the settlement agreements, you’ll find that most of the things that a company has agreed to do in terms of reducing pollution from its plants are things that the company is already required to do under other Clean Air Act regulations. If you look at some settlements, you’ll see that, in some cases, the companies are simply agreeing to do things *that they have already done*. This means that government enforcement officials, in their press releases, are claiming credit for things that have already been done or pollution reductions that would be achieved anyway – i.e., even without the settlement. And if you’re familiar with the other CAA programs that regulate the same emissions from the same facilities, you would see that all the pollution reductions that have been claimed for these NSR enforcement could be achieved by other, more cost-effective CAA programs.

Again, it is instructive to look at the NSR program as it has been imposed on the power sector. The NSR settlements that have required companies to reduce emissions from their coal-fired power plants apply almost exclusively to plants located in areas that, under other CAA programs, have “caps” on the total amount of pollution that can be emitted by the coal-fired plants in these areas. Because of the area-wide cap, a settlement requiring emission reductions from certain plants does nothing to reduce total emissions in that area. It simply ensures that they are achieved at some plants rather than others – and not necessarily where the emission reductions are most needed or where they can be achieved most cost-effectively.

#### **Inaccurate Claims that Proposed Reforms Would Cause Increases in Pollution**

In written testimony submitted as part of this Subcommittee’s February 14, 2018, hearing on NSR, a representative of the Natural Resources Defense Council (NRDC) made some rather remarkable claims about the legislation being considered today. A word search shows 10 different places where his written testimony says that the reforms in the discussion draft would allow either “massive” or “enormous” increases in “harmful air pollution.”

Statements like this are just plain silly – and demonstrably untrue. They ignore the fact that every single existing facility that is covered by the NSR program is also regulated by multiple

other Clean Air Programs – in the case of coal-fired power plants, as many as 13 other programs that regulate the very same pollutants covered by NSR. I can guarantee that, even if the NSR program for existing facilities completely disappeared tomorrow, there would not be a “massive increase in air pollution.” In fact, there would not be any increase in emissions from the group of facilities covered by the NSR program. Because of the many other programs that regulate the same pollutants from the same facilities, air pollution would continue to decrease as it has since 1990.

As I explain in my written statement, the reforms being proposed by Mr. Griffith would simply re-introduce some common sense into the NSR program and make sure that it does what it was intended to do:

- Ensure that, when a new industrial facility is built or an existing facility is significantly expanded, modern pollution controls will be used to minimize its emissions; and
- Ensure that the NSR program does not make it hard for companies to keep their facilities in good working order and, where possible, to reduce the operating cost of these facilities by making them more efficient.

Some critics of the draft legislation suggest that they will not support it unless there is a guarantee that it will not allow any increase in emissions from any industrial facility. But even with the current NSR program, no one could offer such a guarantee because NSR does *not* prevent facilities from increasing their emissions. Because most facilities do not operate at full capacity, they can usually increase their production (and thus increase emissions) without triggering NSR. A facility triggers NSR only if (1) it makes a non-routine change and (2) this change (and not an increase in demand) would cause an increase in annual emissions.

Even if a facility *does* trigger NSR, this does not necessarily prevent it from increasing its emissions. The NSR program is designed to ensure that new facilities and facilities that undergo major modifications will be well controlled. If a facility increases its capacity and thus must go through NSR, it can still increase its emissions, but it must use the best available control technology to minimize the emissions increase.

No Clean Air Act programs ensure that there can never be “any increases in air pollution” from “any source.” But this is hardly the point. Air quality problems are caused by the combined emissions from many different sources. What we should all care about is improving and protecting air quality, which involves reducing the collective emissions from many different sources. The NSR program has not played a significant role in reducing air pollution from existing sources in the past, and there is no reason to believe that it will do so in the future.

#### **The NSR Program as it Applies to New Facilities**

In a recent paper published in the Environmental Law Reporter (ELR), Art Fraas (a Visiting Fellow at Resources for the Future), John Graham (the Dean of the School for Public and Environmental Affairs at Indiana University), and I discuss the NSR Program at some length and outline a number of reforms that would make it easier to build new manufacturing facilities in the U.S. as long as they use the best available technology to control their emissions. That paper,



entitled “EPA’s New Source Review Program: Time for Reform?” is focused primarily on the ways in which the NSR Program applies to new facilities. Rather than summarize that paper here, I have asked that it be included in the record for this hearing. That said, I would be happy to answer questions that any members of the Subcommittee might have about it.

**The NSR Program as it Applies to Existing Facilities**

As the name implies, the New Source Review or NSR program was designed primarily for “new sources” of emissions (new manufacturing facilities and power plants). Before any new major source can be constructed, it must first go through a permitting process that identifies the “best available control technology” to minimize emissions from the new facility. The permit applicant must then obtain an NSR permit that requires the new facility to meet emission limits that can be achieved with that technology. The basic theory of the program is that modern pollution controls should be part of the design and construction of any new major source of emissions. The NSR program is probably the most important CAA program for controlling pollution from new sources.

The NSR program also applies to existing sources, but only if they make “major modifications” as defined under EPA regulations. Again, the theory is that, when there will be a modification to an existing plant that will significantly increase emissions, modern pollution controls should be designed into the modification. Although the NSR program is the primary regulatory tool for controlling emissions from new plants, it was *not* intended to be a key program for controlling emissions from existing facilities. As EPA stated in a 2002 Report on the NSR program:

The NSR program is by no means the primary regulatory tool to address air pollution from existing sources. The Clean Air Act provides for several other public health-driven and visibility-related control efforts: for example, the National Ambient Air Quality Standards Program implemented through enforceable State Implementation Plans, the NOX SIP Call, the Acid Rain Program, the Regional Haze Program, etc. Thus, while NSR was designed by Congress to focus particularly on sources that are newly constructed or that make major modifications, Congress provided numerous other tools for assuring that emissions from existing sources are adequately controlled.

*New Source Review: A Report to the President (2002)* at pp. 3-4.

The question of what is a “major modification” that triggers NSR at an existing source has been the source of much controversy and is discussed in several EPA regulations, more than a thousand pages of guidance documents and Federal Register notices, and dozens of court cases – and there is still much uncertainty about how to determine whether something is a major modification.

This is important to industry because, if a company makes a “major modification” to a facility, the cost of going through NSR, and the delays it can cause, are very substantial. In some cases, companies that have undertaken a \$500,000 project that, according to EPA, is a “major modification” that would force them to spend hundreds of millions of dollars in new control equipment. Even without the cost of new equipment, the time it takes to go through the NSR

permitting process can be very long – about a year on average but, in some cases, many years. Because of the cost and delays, companies are very reluctant to do anything that might trigger NSR.

Over the last 15 years, EPA enforcement officials have tried to expand the definition of major modification in an effort to capture more facilities into the NSR program. At the same time, companies have spent much more time and effort figuring out how they can maintain their facilities without triggering NSR. I know of companies that actually employ teams of people full-time to make sure that the investments they make to maintain their facilities do not trigger NSR, and companies often make suboptimal decisions about investing in their facilities because of the current NSR program. As a result, the NSR program makes it more difficult for companies to do things that we should all want them to do – like maintaining the reliability and safety of their facilities and making them more efficient.

#### *The Emissions Increase Test*

Under the statute and EPA's regulations, a major modification is a "physical change or change in the method of operations" at an existing source that will cause a "significant emission increase," which is defined as an increase in annual emissions that is greater than certain thresholds (which are different for different pollutants). As EPA has noted, this definition essentially creates a two-step test that a plant operator must use in order to determine the applicability of NSR requirements to any particular project at an existing source: "first, you will determine whether a physical or operational change will occur. If so, then you will proceed to determine whether the physical or operational change will result in an emissions increase over baseline levels." 67 Fed. Reg. 80186, 80187 (Dec. 31, 2002).

Under EPA regulations, "routine maintenance, repair, and replacement" projects are exempted from the definition of a physical change, so there has been much litigation over whether certain specific projects are "routine." But, perhaps surprisingly, there has also been much controversy over the question of how to determine if a physical or operational change will result in an emissions increase.

Another CAA program, referred to as the New Source Performance Standards or NSPS program, employs the exact same definition of the term "modification." In fact, when Congress added the NSR program to the CAA in 1977, it simply adopted the existing statutory definition of "modification" that had been used since 1970 for the NSPS program. Under the NSPS, EPA determines whether a project at a plant is a "modification" by looking at the maximum hourly emission rate of the plant before the project and comparing it to the maximum hourly emission rate of the plant after it. If a project does not increase this rate – that is, if the plant has not been changed in a way that would increase its maximum hourly emissions rate – then the project is not a modification. There is rarely any controversy about this issue because the maximum hourly emission rate is a readily available number that is based on the design of the facility.

Under the NSR program, however, EPA has adopted a very different approach for determining if a physical or operational change will cause an emissions increase – not based on plant design but on projections of future annual emissions that depend on many other factors besides the physical design of a facility. First, a company must determine its "baseline" emissions. For power plants,

this is annual average emissions of the highest 2-year period of operation over the last 5 years. For other facilities, it is the highest yearly emissions during the last 10 years.

Then, a company must make a projection of what its future annual emissions will be during the 5- or 10-year period after the change (depending on the type of project being undertaken). If projected future emissions are higher than baseline emissions by more than the "significance thresholds," then the company is allowed to subtract the amount of its projected future emissions that are unrelated to the physical change at the facility (such as increased demand for the product being produced). If projected future emissions are still higher than the "significance threshold," then the physical change is a "major modification" that triggers NSR.

This is complicated enough, but there has been substantial controversy as to how future annual emissions should be projected. Some power companies have projected future emissions using sophisticated computer modeling techniques that they use to plan future investments – only to have EPA enforcement officials insist that they should have used another method that would have predicted higher emissions and thus that the project triggered NSR. Like virtually every other NSR issue, this has been the subject of protracted litigation.

Because of all the uncertainty and controversy caused by the "emission increase test," it would be helpful for Congress to clarify this issue. In my view, the best approach would be to make clear that there is not a "major modification" under NSR if there is not a "modification" as defined under NSPS. Thus, companies (and EPA) would evaluate a project to determine whether it would increase the maximum hourly emission rate at the plant. If not, then the project does not trigger NSR. If so, then the project would be a modification and would then be evaluated under the current NSR test to determine whether it would be a "major modification" that would trigger NSR.

There are at least two important reasons for Congress to consider such an approach. First, it would provide much more certainty to EPA, states, and the regulated industry. As opposed to the current NSR approach, the maximum hourly emission rate is an objective measure based on the design of the facility and is easily ascertainable. As recent experience has shown, there is much subjectivity under the current approach and many different ways to project future annual emissions and then determine the amount of those emissions that are unrelated to the project being evaluated.

Second, from an environmental perspective, a one-hour test is much more meaningful because the most stringent EPA standards are based on maximum concentrations of a pollutant averaged over one hour (for SO<sub>2</sub> and NO<sub>2</sub>), eight hours (for ozone and CO), and 24 hours (for PM<sub>2.5</sub>). The only pollutant for which a longer "averaging time" is meaningful is lead, for which the air-quality standard is based on a 3-month average (and which has rarely, if ever, been addressed by NSR.) Simply put, in terms of protecting human health, the maximum amount of a pollutant that a facility emits in one hour is much more important than the amount it emits in a year.

#### *Energy Efficiency Projects*

I believe that Congress should also consider legislation to ensure that NSR is not an impediment to improving energy efficiency. There is much interest in reducing carbon dioxide (CO<sub>2</sub>)

emissions in the U.S. and around the world. And I believe that there is a consensus that the most cost-effective way to reduce CO<sub>2</sub> from existing facilities is to improve their energy efficiency – that is, to make physical or operational changes that would enable them burn less fossil fuel (coal, oil, or natural gas) to produce a given amount of product (whether it be electricity or gasoline or widgets).

However, the current NSR program is a significant impediment to energy efficiency projects because EPA, in a number of NSR enforcement cases, has argued that energy efficiency projects trigger NSR – i.e., that an existing facility must go through the cumbersome and costly NSR permitting process before it can do such a project. I am aware that, for this reason, a number of companies have identified energy efficiency projects that they would like to undertake but have decided *not* to do them for fear of triggering NSR.

It may seem strange that EPA would take a position that actively discourages energy efficiency, but here is the theory espoused in several NSR enforcement cases against power plants: When a facility owner makes a physical or operational change at a facility to make it more energy efficient, this reduces the cost of operating the facility, because it uses less fuel per unit of production. For this reason, the more energy efficient facility would have a competitive advantage over other facilities that make the same product. As a result, the more energy efficient facility will take away business from less efficient facilities and operate longer hours. Because it operates longer hours, it will increase emissions and, as a result, the energy efficiency project triggers NSR.

If you have followed this convoluted reasoning, I think you will be outraged by it. For one thing, if a more energy efficient facility takes away business from its competitors, then it will certainly reduce total CO<sub>2</sub> emissions – because less fuel will be burned per unit of production. As a general rule, I think we should all agree that the government should adopt policies that encourage energy efficiency.

However, in its zeal to bring NSR enforcement actions, EPA has implemented the NSR program in a way that clearly makes it more difficult and costly to make energy efficiency improvements to existing plants. If Congress wants to encourage energy efficiency, it should adopt legislation to make it clear that any physical or operational change at an existing facility that makes it more energy efficient – that enables it to reduce its CO<sub>2</sub> emissions per unit of production – does not trigger NSR.

#### *Pollution Control Projects*

As noted above, the NSR process is long, cumbersome, and often very costly. As a result, facility owners try to avoid it whenever they can. In some cases, it would be in their interest to carry out pollution control projects, but they choose not to do so because they do not want to trigger NSR. If there were an NSR exemption for pollution control projects (as there already is for NSPS), it would remove this disincentive, and we would see more facilities carrying out such projects.

*Reliability and Safety Projects*

Under both the NSR and NSPS programs, routine maintenance, repair, and replacement (RMRR) projects are specifically have always been excluded from the definition of a modification. This exclusion was designed to ensure that plant owners could properly maintain their facilities without the need to go through NSR permitting. Over the last two decades, however, EPA has tried to narrow the scope of this exclusion in order to capture more facilities in the NSR program. As a result, companies have often made suboptimal decisions about maintaining and improving the reliability and safety of their facilities. To address this concern, Congress should amend the Clean Air Act to ensure that projects that are specifically designed to maintain or improve reliability or safety are not "modifications" that trigger NSR.

*Authorizing the Administrator to Require NSR Review of Individual Reliability, Safety, Energy Efficiency, and Pollution Control Projects*

To address concerns that any exclusion for reliability, safety, energy efficiency or pollution controls projects might be too broad, Congress could authorize the Administrator to force such a project to go through NSR if it would otherwise be a modification (because it would increase hourly and annual emission) and if he or she determines that the increase in emissions would harm human health or the environmental and that the overall project would not be environmentally beneficial. This is similar to the approach that has long been used for pollution control projects under the NSPS program, which excludes such projects from the definition of an NSPS modification except when the Administrator determines that a project would not be environmentally beneficial.

\* \* \* \* \*

Again, I very much appreciate the opportunity to appear before the Subcommittee and hope my testimony will be helpful to you as you review the legislation under discussion today. I would be happy to answer any questions that you may have.

Mr. SHIMKUS. Thank you very much.

I will now recognize myself for the round of questions. I recognize myself for 5 minutes and I want to start with Mr. Alteri.

The discussion draft seeks to make it easier for companies to carry out energy efficiency and pollution control projects.

Would accelerating efficiency improvements and pollution control adoption even on just existing sources be a net benefit for meeting clean air standards?

Mr. ALTERI. Yes.

Mr. SHIMKUS. Let me go to Mr. Eisenberg. In your testimony you described how the National Association of Manufacturers' member companies are struggling to sell gas turbine upgrade technologies because customers are not willing to buy and install equipment that would trigger New Source Review permitting.

That being the case, would you agree that New Source Review is slowing innovation and the adoption of newer technologies?

Mr. EISENBERG. I would agree.

Mr. SHIMKUS. Very simple answers.

Would today's discussion draft make it easier for companies to install newer and cleaner equipment at existing facilities?

Mr. EISENBERG. We believe it would, and it's a massive potential market. I mean, as I said during my oral remarks, that one particular manufacturer, just looking at its own turbine, said it could be somewhere on the order of over a 100 million tons of CO<sub>2</sub> potential reduced if everyone were to upgrade the steam turbine and gas turbine efficiency upgrades that they make available.

Mr. SHIMKUS. And I think you made a good point with our tax bill that was passed—the expensing provision. We are seeing it throughout, really, the country—a great increase in capital for new development and expansion and stuff like that. So this would segue very well into the ability of modernizing, retrofitting facilities, refineries, and even small furniture makers.

Mr. EISENBERG. That's absolutely true and the idea wasn't mine. It came from a member of ours who said hey, let's change the internal rate of return on a project we were thinking about undertaking, and now we can do it and it's beneficial to the environment. So we are going to look more into that ourselves, too.

Mr. SHIMKUS. Great. Thank you.

Mr. Holmstead, concerns have been raised that the discussion draft reforms would enable existing facilities to collectively produce higher annual emissions.

Even if hourly emission rate at the facility goes down, how do you respond to this concern?

Mr. HOLMSTEAD. It's just not true. These facilities are covered by many, many other different programs that would—that would assure that emissions continue to decrease over time.

So anybody who claims that this bill would increase emissions is just wrong.

Mr. SHIMKUS. Yes. We have a pretty good record, I think, on the subcommittee of trying to find that middle ground. This one's going to be a little bit tougher, I assume.

And it's really over this debate about the question that I just posed is I think that my friend's concerns are that emissions are going to go up.

I think you make a good point—there's a lot of other air standards out there that are going to make sure that that doesn't happen.

Mr. Buckheit, riddle this for me, will you? Is there a lot of other clean air rules and regs that'll prohibit that from increasing?

Mr. BUCKHEIT. With all due respect to my good friend Jeff, we've had these debates for decades. There are a lot of other programs there, none that would specifically address this issue.

It is only the NSR program that will prevent each of these plants that we've been talking about from increasing annual emissions, and it's not all about power plants but it's mostly about power plants. Refineries and the like—they tend to run 87/60 full time year round and so the hours of operation are not the issue for them so much. But and so reducing it—there's already an embedded hourly test for them.

If you increase your hourly emissions you're going to increase your annual emissions. This is more about the power sector where because of forced outages they can't run for 3 weeks a year and then they make the plant more reliable and they run those 3 weeks a year.

Mr. SHIMKUS. Well, my time's almost expired. I want to go to Mr. Alteri.

Do states and other permitting authorities have other tools besides New Source Review to control existing facilities' annual emissions?

Mr. ALTERI. We do, and I think you really have to look at the nexus between the National Ambient Air Quality Standards. Previously, the standards were on an annual basis.

Now they're hourly basis, and really, it is imperative that the maximum hourly emission rate is limited and not allowed to violate those standards.

Mr. SHIMKUS. And that's what Congressman Griffith in his bill is attempting to do—marry a successful standard with what is viewed out there as an unsuccessful. Would you agree?

Mr. ALTERI. I would, and you have the New Source Performance Standards also that play a role.

Mr. SHIMKUS. Great. Thank you very much. My time is expired.

The chair now recognizes the ranking member, Mr. Tonko, for 5 minutes.

Mr. TONKO. Thank you, Mr. Chair.

It's been suggested that short-term such as hourly emission rates are more meaningful from an environmental perspective, since the number of NAAQS are based on short time frames.

Mr. Buckheit, I want to ask you what you think about that assertion and let me perhaps put it in the context of communities that are in that range of those facilities.

Do these communities located near these facilities, which may be dealing with unsafe levels of particulates or other pollutants, benefit from maintaining an hourly emissions rate even if it causes a significant increase in overall pollution?

Mr. BUCKHEIT. It's kind of both, Congressman. There are some local impacts, particularly for the 1-hour SO<sub>2</sub> standard where if you're near a power plant such as the facility in Alexandria here,

you can have certain weather conditions where you will get unhealthy levels on a short-term basis.

The larger public health issue is chronic exposure to PM 2.5, which is annual or multi-year exposures to lower levels. That is the more consequential form of air pollution—most consequential form of air pollution in this country.

Mr. TONKO. Thank you.

And Mr. Buckheit, you said that NSR permits for existing power plants are very rare. I believe that was the term you used.

Why do you think that permits are rare? Is it because they're costly, over burdensome, or easily avoided?

Mr. BUCKHEIT. I would say easily avoided is the right answer.

Mr. TONKO. And your testimony mentioned that the courts have weighed in on the so-called routine maintenance exemption in the past, and to make it clear, it was only for legitimate maintenance and not large capital projects.

Is it fair to say there's been a strategy over the years by these facilities to find loopholes that might enable them to make modifications without needing to undergo NSR program requirements?

Mr. BUCKHEIT. Yes. The case you're referring to, Congressman, is the Webco case back in 1988, which the courts enforced a decision under the Bush I administration where replacing these large projects would not be considered routine maintenance.

Thereafter, a number of those lobbying law firms in town continue to press the notion that you could do anything or almost anything and call it routine maintenance and the number of the large utilities followed that advice, did projects without offsetting, without any of the other legal routes to avoid NSR permitting and without going through NSR permitting and that was the basis of our enforcement initiative back 10 years—1998 and thereafter.

Mr. TONKO. Thank you.

Can you give us a sense of the current operating status at facilities that have been putting off these major modifications? Generally speaking, are they in need of significant investments in order to keep running?

Mr. BUCKHEIT. Well, our fleet is getting pretty old—our coal fleet. Most of the coal-fired power plants came online in 1972 and before, and more and more the maintenance budgets have been cut at the plants as cost becomes an issue and competition in the electric market with natural gas and others become an issue.

So I can forecast that as these plants—they're now 60 years old, then coming on 70 years old and then coming on 80 years old. There's going to be a time when engineering is going to force them to replace these components all over again.

Mr. TONKO. So if the modification definition is expanded to allow projects designed to "restore, maintain, or improve the reliability or safety of the source," would that essentially cover any investment needed for life extension projects?

Mr. BUCKHEIT. Yes. You could fundamentally replace the plant.

Well, you can't go all the way there because then you might trigger some part of the NSPS rule. But you could spend 20, 30, 40 percent of the cost of the new plant replacing these very large components without having to put on controls.



Mr. TONKO. And, finally, do you believe this discussion draft is just the latest attempt to create new loopholes to enable these sources to avoid some of the NSR program's requirements such as installing pollution controls?

Mr. BUCKHEIT. This is the current wave. It happens every 8 years or so.

Mr. TONKO. OK. Thank you for your response and, Mr. Chair, I yield back.

Mr. SHIMKUS. Gentleman yields back his time.

The Chair now recognizes the gentleman from West Virginia, Mr. McKinley, for 5 minutes.

Mr. MCKINLEY. Thank you, Mr. Chairman.

Mr. Holmstead, if I could direct perhaps my comments to you.

Earlier, I think you were in the room when we were asking the previous speaker whether this idea of routine maintenance, because I had had conversations with some utility companies that have considered replacing the fins on their boiler as routine maintenance and that's apparently been deemed that is a routine maintenance type of work.

So if that's the case that they can maintain their existing boiler, which is probably inefficient because it's 40 or 50 years old, and then I go back to what Congressman Tonko and I have been working on now for 3 or 4 years getting research money to upgrade our and improve our turbine efficiency, here we have an opportunity to either replace the fins due to turbidity or erosion or whatever that might have caused and keep the efficiency low or we can use the research that we've paid for to implement a new technology, a new boiler, in that and improve the operation of that plant.

But in so doing, that potentially triggers and likely triggers an NSR, and then you have to keep into consideration that from the February testimony we had here that you can go back as long as—there's 700—I think, Mr. Allen, you said this, 700 documents that have to be filed to comply. But in Region 9, the average approval is 777 days to get that approval.

You may find it's over 2 years to get an answer of whether or not you're going to be in compliance with the NSR.

How would you react to that? Am I reasonable about what's the incentive for people to improve the efficiency of their plant if it may take 2 and a half years to get the approval?

Mr. HOLMSTEAD. Well, you have highlighted a big problem, that in a series of cases EPA has argued that if you improve the efficiency of a power plant you trigger NSR.

So it might be in your interest to invest in something that would reduce your CO<sub>2</sub> emission rate. It would reduce the emission rate of other pollutants.

But here's the theory that Bruce has propounded in several cases. If you make your plant more efficient you will reduce the operating costs. So the cost of producing a megawatt hour will go down. That will make you more competitive than other plants so your plant will run more often, will run more hours. So the claim is that if you make your plant a little bit more efficient you might have a lower operating cost. Therefore, you would run more hours. Therefore, you can't make your efficiency improvement unless you go through this NSR process that can take, for a coal-fired power

plant, 2 years. It would be the blink of an eye, and you might have to install brand new controls that would cost several hundred million dollars.

So how many companies are actually going to make a decision to become more efficient if those are the consequences?

Mr. MCKINLEY. Thank you.

I yield back.

Mr. SHIMKUS. Gentleman yields back his time.

The chair now recognizes the gentleman from Michigan, Mr. Walberg, for 5 minutes.

Mr. WALBERG. Thank you, Mr. Chairman. Thanks to the panel for being here.

Mr. Eisenberg and Mr. Johnson, I've got a question I would like to ask you here.

Due to the positive impacts of the recently enacted tax reform bill, many companies are looking to make greater investments in new construction projects and facility upgrades. I've seen it in my district in plenty of sites.

What effect does NSR have on a company's ability and willingness to pursue new projects or upgrade existing facilities?

I will go with Mr. Eisenberg first.

Mr. EISENBERG. Thank you, Congressman.

So it's a barrier. It's a barrier that is in the way of a pretty amazing window that we are seeing on the ground in real time—manufacturers taking on new projects because of tax reform.

I appreciate that this has been a coal-dominant discussion. But for us, I want to make clear that it is very much about manufacturing.

We asked our members at the beginning of last year, tell us what you care about in the regulatory space that we should be working on, and this issue was number one in the environmental space.

So, when I talk about NSR I hear from aerospace and defense and steel and aluminum and cement and pulp and paper and chemicals. These are the folks that are doing those things on the ground that you just mentioned because of tax reform and other things that real or perceived have to deal with NSR and need a clear signal that NSR is a problem.

To borrow a phrase from another context, the first step to solving a problem is admitting you have a problem.

Mr. WALBERG. Yes.

Mr. EISENBERG. We have a problem, and we really hope that Congress and EPA will help us fix it.

Mr. WALBERG. Mr. Johnson. Thank you.

Mr. JOHNSON. Thank you, Congressman.

In the not for profit sector, the tax bill has not had as big of an impact on us but we are constantly looking for ways to improve the economics and the efficiency of the power plants that we run to generate electricity to keep our costs down for the electricity in much of rural America and that's just a constant effort by all of our generation and transmission cooperatives to do that, and NSR is a barrier.

We have had a number of our member cooperatives who have indicated they've considered undertaking projects and have decided not to do that because of the uncertainty of the NSR permitting

program. But they have undertaken other projects. We've installed lots of pollution control equipment and Mr. Buckheit's testimony implied that older units have not added pollution control equipment. That is just not the case. The utility industry has invested over \$100 billion on pollution control equipment to reduce those emissions and make the accomplishments that have been documented here.

So we are constantly looking for those opportunities this is in fact a barrier and the bill would help remove that barrier.

Mr. WALBERG. And, of course, you have that symbiotic relationship with business and manufacturing that goes with it. You have to be prepared for it and I've seen those upgrades at a great expense in my district as well in the utilities.

Mr. JOHNSON. A big part of what we do is try to make sure the economies of our communities are strong and that we are investing in businesses and bringing those jobs to our communities.

Mr. WALBERG. OK. Let me follow up with both of you. Does the NSR program create an incentive for manufacturers and utilities to operate their plants exactly as they were built, and secondarily, so what challenges is this creating?

Mr. EISENBERG. So yes, and not every time but by and large it does create a perverse sort of incentive to only replace your equipment with the vintage of the equipment that was from when it was first manufactured. It doesn't really make any sense in the grand scheme of things. Certainly, technology develops and gets better and manufacturers have an interest in installing that.

NSR is a barrier and I've had countless companies say, look, the timeline that we needed to get through to upgrade this boiler or do this or do that, NSR, my fear of waiting 2 years to get a permit and maybe having to litigate it isn't worth that expense. I can't justify it to my board and my CEO.

So it is a barrier. It is not the only barrier but it is one that we hope we can fix.

Mr. JOHNSON. And Congressman, the utility sector—not to be evasive, but there are lots of things we have to consider when making determinations about how to improve plants, what to go through.

This is but one of those, but it is one that slows things down, doesn't speed things up.

Mr. WALBERG. Yes. To have a drag on your process is just that and we take as many drags away from it then it works better.

So thank you. I yield back.

Mr. SHIMKUS. The gentleman yields back his time.

The chair recognizes the gentleman from Georgia, Mr. Carter, for 5 minutes.

Mr. CARTER. Thank you, Mr. Chairman, and thank all of you for being here. We appreciate your presence here today and the work that you're doing.

Mr. Johnson, I will start with you. In your testimony, you talked about the current system and how flawed it is for companies and organizations that are wanting to do the right thing and trying to do the right thing and how easy it is for them to receive enforcement actions.

How important is it for us to change the metric that's used to determine emissions from the annual emissions rate to an hourly rate?

Mr. JOHNSON. Going to the hourly emissions rate would harmonize the rules between the NSR and the NSPS programs.

So it would make some internal consistency. It would give our members much more clarity about what the rules of the road are and then they can make informed decisions about what they would do to improve the efficiency of their power plants or do other maintenance activities because they would know what that clear line is between routine maintenance and what a major modification is.

Giving them that clarity would speed their processes, cut our costs, while maintaining the environmental performance of the plant—

Mr. CARTER. Have you communicated that to the EPA? Do they ever ask for any input or—

Mr. JOHNSON. We went through a process during Bush II administration. Mr. Holmstead was at EPA at the time, trying to clarify rules of the road on New Source Review.

Ultimately, that was not successful. We've asked for legislative clarifications, as I've testified, we've been looking for some clarity in this program for 2 decades and now is a good a time to act as any.

Mr. CARTER. Wow. Do you have any examples of any plants and they just had to shut down as a result of the NSR being triggered?

Mr. JOHNSON. I can't point to at this moment a particular plant that closed because of NSR, per se. But where we've had plants that have closed or reduced their operations has been due to a multitude of factors and there have been times when plants have considered making, say, turbine upgrade projects or other improvements that improved the efficiency of the plant, that, as I said, they declined to do because of the uncertainty of the NSR process, its timeline, the litigation that would follow from that, and ultimately our members tend to operate in a small C conservative business manner to try to keep those costs down and avoid risks when possible.

Mr. CARTER. OK. Thank you.

Mr. Alteri, Chairman Shimkus has mentioned in our February meeting that—and when we were talking about the New Source Review there were over 700 guidance memos.

How do you sieve through all that? That's got to be unbelievable.

Mr. ALTERI. It surely is. EPA does a nice job out of Region 7 of trying to capture all of those applicability determination through an index. But there's also ongoing litigation that we have to be aware of because, ultimately, they decide.

But, again, in Kentucky we are prohibited from regulating by policy and guidance and it should be noted that kind of the basis for what all NSR permitting actions are taken are through the 1990 puzzle book and it is still in draft form.

And so we just want EPA to give us the certainty that when we make a decision that it's a final decision and then the companies can make the adjustments and the changes without fear of ongoing litigation.

Mr. CARTER. Let me ask you, from your perspective, if we were to shift to an hourly emissions rate would that help?

Mr. ALTERI. Well, again, the idea is that you're going to make that unit as efficient as possible and, to Mr. Buckheit's point is that it would be utilized more in increased emissions.

But now with the 2010 standards for NO<sub>x</sub> and SOCS, they're 1-hour standards and that's what the health-based standards are. They're not annual-based standards any longer.

So I think it makes sense to focus on the hourly emission rates.

Mr. CARTER. Good. Good.

Thank you all, again, for being here and, I hope you will not be discouraged. I hope you will continue work. I want to think it's a new day at EPA and that they're more receptive and more input from you. So thank you for what you're doing.

Mr. Chairman, I will yield back.

Mr. SHIMKUS. The gentleman yields back his time.

The chair now recognizes again the very patient author of the legislation, Mr. Griffith from Virginia, for 5 minutes.

Mr. GRIFFITH. Thank you very much. If we could get the map put up on the board.

Mr. Eisenberg, I've told the story earlier about the conveyor belt to nowhere because they didn't want to mess with the conveyor belt because—and maybe they're wrong.

But the confusion and the concern about NSR is a problem. In response, we heard from Mr. Baldauf that they were concerned about New Jersey's mercury and other chemicals going up, and I knew I had this map somewhere in the back and if you can read it—and if we need the bigger one we can bring it out—but that's a listing of the mercury deposited in the United States from foreign sources and you can see New Jersey is in the 40 to 45 to 50 percent range of foreign sources.

Am I not correct that a large amount of that comes from manufacturing and electrical generation in Asia and other—I see Florida's got a high percentage so I would assume some of it may be from Central America, too.

Wouldn't that be correct, yes or no?

Mr. EISENBERG. That would be correct, and not just on mercury but other pollutants as well.

Mr. GRIFFITH. And so when we have situations where the confusion in the United States is a manufacturer of furniture can't change the conveyor to nowhere because he's no longer putting the lacquer on at that end of the conveyer belt, that tends to make our Asian competitors more competitive, does it not, when they're manufacturing goods?

Mr. EISENBERG. It does.

Mr. GRIFFITH. And in fact, I would submit—and I want to know if you agree—that in some ways, by having rules that don't make sense we actually might increase the mercury being deposited from foreign sources in New Jersey that Mr. Baldauf is worried about, aren't we?

Mr. EISENBERG. Well, certainly, if we are not promoting more efficient generation and more efficient technologies, yes. It would only exacerbate the problem.

Mr. GRIFFITH. But usually we are trying to be more efficient but we've got this rule in the way.

Mr. Holmstead, I don't know if you can answer this question or not, and if not if you can get back to me later—I think it's interesting, as I've been listening to the discussion.

My understanding is is that the Obama administration EPA, which was very aggressive on a lot of these issues—a lot of these issues never tried to take the New Source Review rule and implant that into the New Source Performance Standards. Am I not correct on that?

Mr. HOLMSTEAD. No, that is right.

Mr. GRIFFITH. And if the New Source Review rule was so much better, because we heard from Mr. Johnson earlier, the language is the same in the bill but it's been interpreted differently. And if that was so much better, I would have thought they would have done that.

Now, the hourly emissions rate test utilized by the New Source Performance Standards program and included in this legislation provides an objective measure based on the facility's design and we've heard that it's easily determined by facility operators.

Why is it easier to calculate and what is so complicated about the current emission project process?

Mr. HOLMSTEAD. So the hourly emission rate is really the capacity of the plant and people who design the plant, people who buy that equipment, that's what they care about.

That's an objective number, and I am not aware that there's ever been an issue whether that was triggered under the NSPS.

People do trigger it sometimes which means that they have to meet more efficient standards. With the annual test, Mr. Buckheit said something that's very revealing.

So if you have a plant that in some time over the last 5 years had a forced outage, so you had a part that broke down and you had to shut down your plant for a day, even half a day, if you replace that part, then under the theory of—that EPA has taken in these cases, you increase your emissions because it was shut down for 24 hours or 8 hours, during some period and now that that part's not going to break down, the theory is well, you're going to increase your annual emissions.

Some courts, but not all, have accepted that, and that's one of the other problems. We have different NSR rules around the country based on decisions by circuit courts on some of these theories.

Mr. GRIFFITH. So, basically, if you're more efficient, that's bad from the viewpoint of those that don't want to——

Mr. HOLMSTEAD. Or——

Mr. GRIFFITH [continuing]. Or if you're just not closed down some——

Mr. HOLMSTEAD. Or more reliable.

Mr. GRIFFITH. Or more reliable.

Mr. HOLMSTEAD. Right. So if you're more reliable then you can operate more hours and that should trigger NSR.

Mr. GRIFFITH. And whether we are dealing with manufacturing or we are dealing with electric generation or refining, we actually want those people to be more reliable, don't we?

Mr. HOLMSTEAD. I would think so. But we also want them to reduce their pollution where we can and we have all these other tools.

We are not waiting for them to trigger some program. We are saying, here's how you need to reduce your pollution and we are going to focus on it.

Mr. GRIFFITH. I think you pointed out earlier there are 14 overlapping programs with the NSR. Is that accurate?

Mr. HOLMSTEAD. Well, for the power sector there's at least 14 other programs that regulate the very same pollutants from the same plans.

Mr. GRIFFITH. Kind of makes it hard for folks to comply when you have got all these overlapping and sometimes confusing regulations, isn't it?

Mr. HOLMSTEAD. Well, it's good for Clean Air Act lawyers.

Mr. GRIFFITH. Yes, sir. I can appreciate that. As a lawyer, I am not sure I would be upset about that part of it but I hate it for the American people.

I yield back.

Mr. SHIMKUS. The gentleman yields back his time.

Before I do the closing document, I was asked by the minority—I am going to ask unanimous consent to allow Mr. Baldauf to at least respond to the air transport issue, if you would like, since the State of New Jersey was mentioned in my colleague's comment.

Is that correct? Is that what you wish.

Mr. BALDAUF. Sure. So, generally, the transport issue just has to do with the simple fact that, you know, as a state we are probably almost in the top couple cleanest energy-generating states in the country.

But the reality is no matter how clean your in-state generation is, if there's no control on the upwind states, you have the same amount of pollution, unfortunately, for your citizens as the other states do.

One of our focus is on NSR. There's been talk about all the tools in the toolbox. Well, at the end of the day, these grandfathered facilities have remained unchanged for 40 years. So those other tools don't seem to be helping.

I agree that the NSR rules are flawed. They're complicated, and I do think they need to be revised. But they need to be revised in such a way to make sure these grandfathered facilities reduce emissions and not increase emissions.

Mr. SHIMKUS. Well, I thank you very much and you're welcome to give us some input on—we do try to get to some type of compromise.

We'd sure like to get this fixed. This might be a bridge too far but we could give it a try, right, Congressman Griffith?

Mr. GRIFFITH. Absolutely.

Mr. SHIMKUS. So with that, seeing no other further members wishing to ask questions, I would like to thank you all for being here again today.

Before we conclude, I would like to ask unanimous consent to submit the following documents for the record: a joint letter from the American Forest and Paper Association and the American Wood Council.

We also have a letter from the National Parks Conservation Association. Without objection, so ordered.

[The information appears at the conclusion of the hearing.]

Mr. SHIMKUS. In pursuant to committee rules, I remind members that they have 10 business days to submit additional questions for the record and I ask that witnesses submit their responses within 10 business days upon receipt of the questions.

Without objection, the subcommittee is adjourned.

[Whereupon, at 12:48 p.m., the committee was adjourned.]

[Material submitted for inclusion in the record follows:]





**American  
Forest & Paper  
Association**



AMERICAN WOOD COUNCIL

May 15, 2018

The Honorable John Shimkus  
House Energy and Commerce Committee  
Chairman, Subcommittee on Environment  
2123 Rayburn House Office Building  
Washington, D.C. 20515

The Honorable Paul Tonko  
House Energy and Commerce Committee  
Ranking Member, Subcommittee on Environment  
2322A Rayburn House Office Building  
Washington, D.C. 20515

Dear Chairman Shimkus and Ranking Member Tonko,

I would like to thank you for holding the hearing entitled, "Legislation Addressing New Source Review Permitting Reform" on May 16, 2018. This hearing provides an important opportunity for the Subcommittee to examine the challenges posed by EPA's New Source Review Program (NSR) and how it can be improved -- consistent with the twin purposes of the Clean Air Act to promote public health and welfare, as well the productive capacity of the nation.

The American Forest & Paper Association (AF&PA) serves to advance a sustainable U.S. pulp, paper, packaging, tissue and wood products manufacturing industry through fact-based public policy and marketplace advocacy. AF&PA member companies make products essential for everyday life from renewable and recyclable resources and are committed to continuous improvement through the industry's sustainability initiative - *Better Practices, Better Planet 2020*. The forest products industry accounts for approximately four percent of the total U.S. manufacturing GDP, manufactures over \$200 billion in products annually, and employs approximately 900,000 men and women. The industry meets a payroll of approximately \$50 billion annually and is among the top 10 manufacturing sector employers in 45 states.

The American Wood Council (AWC) is the voice of North American wood products manufacturing, an industry that provides approximately 400,000 men and women in the United States with family-wage jobs. AWC represents 86 percent of the structural wood

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• 202 463-2700 Fax: 202 463-2785 • [www.afandpa.org](http://www.afandpa.org)

222 Catocin Circle SE, Suite 201 • Leesburg, VA 20175  
• 202-463-2766 Fax: 202-463-2791 • [www.awc.org](http://www.awc.org) •

Representatives Shimkus and Tonko  
May 15, 2018  
Page 2

products industry, and members make products that are essential to everyday life from a renewable resource that absorbs and sequesters carbon. Staff experts develop state-of-the-art engineering data, technology, and standards for wood products to assure their safe and efficient design, as well as provide information on wood design, green building, and environmental regulations. AWC also advocates for balanced government policies that affect wood products.

EPA's complex NSR air permit program affects practically every major manufacturing facility in the United States, and unfortunately, it has become a significant impediment to the modernization and growth of the U.S. manufacturing sector. U.S. air permitting and regulatory requirements are out of date, overly conservative, rigid, and time-consuming. The air quality permitting process for new and modified facilities is slow and cumbersome and relies on unrealistic modeling and assumptions, resulting in unnecessary delays, costs and impediments for projects that would benefit both our economy and our environment.

Recently, this problem has become more acute with substantial tightening of EPA's National Ambient Air Quality Standards (NAAQS) closer to ambient background levels. Simply put, when stringent NAAQS are combined with unrealistic air quality modeling and assumptions, there is little or no "headroom" for new or modified facilities in many areas to show that their residual emissions will not contribute to a violation of the NAAQS, even after the installation of the best available pollution control technology.

It doesn't make sense to discourage upgrading plants already subject to myriad other regulatory requirements, or to block beneficial projects using best controls simply due to unrealistic air quality modeling and assumptions. The reality is that energy efficiency and modernization projects for existing sources are delayed, modified or thwarted by complex NSR interpretations that have accumulated and evolved over time. The program requires expensive but unrealistic air modeling that frequently delays projects many months or more and can cost \$100,000 or more to complete. Unreasonable permitting delays tie up investment capital and undermine the economic benefits from expansion projects.

AF&PA and AWC support the draft legislation under consideration by the Subcommittee as it makes important strides in reforms to the NSR program that can ultimately result in more efficient manufacturing while still achieving the goals of the NSR program. Among other things, the draft legislation overrides past adverse Court decisions including one invalidating a NSR exclusion for installing new pollution control equipment.

Specifically, the EPA 2002 Pollution Control Project (PCP) Exclusion would have allowed such environmentally beneficial projects to proceed quickly and efficiently. The exclusion was invalidated by the D.C. Circuit in 2005. Because PCPs are no longer excluded from NSR, facilities that want to install more efficient pollution controls, switch

Representatives Shimkus and Tonko  
May 15, 2018  
Page 3

to cleaner fuels, and make modifications to improve energy efficiency must go through the NSR permitting process. For example, a mill wants to upgrade its control system on a bark boiler from a wet scrubber to an electrostatic precipitator (ESP) to get greater particulate reductions. However, the pollution control project increases other emissions from the fuel used to operate the ESP so the project is subject to NSR. In many cases, the inflexible and overly conservative nature of the NSR process forces such beneficial projects to trigger PSD review. In this way, the current NSR permitting program creates a disincentive for companies to pursue PCP and/or energy efficiency improvement projects because the process results in delay and increased costs in implementing the project and could result in an environmentally beneficial project not moving forward at all. The bill's primary purpose test ensures that projects intended to reduce emissions such as installation of control devices avoid the burdens of NSR and get installed and working sooner.

Providing an exclusion for PCP projects from NSR would benefit the environment because it would encourage facilities to invest in environmentally beneficial projects. The exclusion will create incentives to reduce emissions. Overall, the bill provides NSR protection for any "efficiency," "reliability" or pollution control project that may be projected to increase hours of operation, but will not increase the maximum achievable hourly rate.

The NSR permitting program is broken and must be updated to allow for growth and innovation while promoting the best available technologies to protect our environment. The forest products industry is one of the largest manufacturing sectors in the nation, has invested billions of dollars on environmental stewardship and remains committed to innovative and sustainable business practices. Yet, an inflexible NSR permitting program impedes beneficial projects and job creation and undermines paper and wood product manufacturers' ability to effectively plan for our future. Thank you for examining this important issue and our industry looks forward to working with you and the Subcommittee as the legislative process moves forward.

Best regards,



Paul Noe  
Vice President Public Policy  
American Forest & Paper Association  
American Wood Council



**NPCA Position on Draft Legislation Addressing New Source Review  
Permitting Reform**

May 15<sup>th</sup>, 2018

Dear Representative,

Since 1919, the National Parks Conservation Association (NPCA) has been the leading voice of the American people in protecting and enhancing our National Park System. On behalf of our more than 1.3 million members and supporters nationwide, I urge you to **oppose** the draft legislation addressing new source review permitting reform that will be before the Energy and Commerce Subcommittee on Environment on Wednesday, May 16<sup>th</sup>. If passed, this bill would weaken air pollution safeguards relied on by millions of people and could lead to increased air pollution and related damage to national parks and surrounding ecosystems. It would also limit public stakeholder engagement in important decisions affecting our air and our climate.

The draft bill would allow industrial sources to increase pollution without environmental review and without requiring application of the best available control technology. This bill undermines the fundamental compromise of "grandfathering" built into the Clean Air Act, in which outdated facilities must install pollution reducing technology when they make modifications to keep a facility running.

The bill would exempt industrial sources from environmental review by changing the test for what constitutes a "modification" under the Clean Air Act's New Source Review (NSR) Program from an annual emissions test to an hourly emissions test. Often, older facilities undergo significant renovations that do not increase hourly emissions, but instead allow the source to operate for more hours per year, increasing overall pollution. Such sources would evade the appropriate application of control technology.

Similarly, the bill seeks to limit NSR applicability to projects that deal with reliability or safety. These projects are also often designed to give new life to outdated equipment, and ultimately allow increased annual pollution. Requiring a lower level of scrutiny for them undercuts the progressive improvements anticipated by the Clean Air Act.

The bill also exempts sources making changes that reduce the emission rate of an air pollutant without considering possible increases in other pollutants. Pollution controls sometimes decrease one air pollutant at the cost of increasing another. This means that a minor decrease in pollution of one kind could negate a regulatory agency's obligation to address significant increases of another type of pollutant.

The real-world outcome of the changes specified in this bill is that few, if any, modifications to outdated industrial sources would undergo New Source Review. It is precisely during this review that federal land managers responsible for protecting the

nation's public lands get the opportunity to consult with the permitting agency, reviewing impacts of proposed modification and engaging in the NSR rulemaking process to ensure that these sources comply with modern standards and laws. The draft bill would amend the Clean Air Act so that a major source of pollution could increase its emissions without notifying the public or federal land managers. This would limit the opportunity for stakeholders to engage in a comment process necessary to ensure transparency in decision-making and accountability.

While we appreciate the desire to encourage projects improving efficiency and reducing emission rates, because these projects can also end up increasing emissions or overall pollution, eliminating review and application of appropriate controls and the opportunity for public review does not make sense.

Thank you for considering our views. For further information, please contact Stephanie Kodish at (865) 329-2424 x28 or [skodish@npca.org](mailto:skodish@npca.org).

Sincerely,

Ani Kame'enui  
Director of Legislation and Policy

GREG WALDEN, OREGON  
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY  
RANKING MEMBER

ONE HUNDRED FIFTEENTH CONGRESS  
**Congress of the United States**  
**House of Representatives**  
COMMITTEE ON ENERGY AND COMMERCE  
2125 RAYBURN HOUSE OFFICE BUILDING  
WASHINGTON, DC 20515-6115  
Majority (202) 225-2827  
Minority (202) 225-3641

June 25, 2018


The Honorable William Wehrum  
Assistant Administrator, Air and Radiation  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

Dear Mr. Wehrum:

Thank you for appearing before the Subcommittee on Environment on May 16, 2018, to testify at the hearing entitled "Legislation Addressing New Source Review Permitting Reform."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Monday, July 9, 2018. Your responses should be mailed to Kelly Collins, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to [kelly.collins@mail.house.gov](mailto:kelly.collins@mail.house.gov).

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,  
  
John Shimkus  
Chairman  
Subcommittee on Environment

cc: The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment

Attachment

**Attachment—Additional Questions for the Record**

**The Honorable John Shimkus**

1. Do you think this discussion draft under consideration today reforms the NSR program while still ensuring air regulators have the tools they need to protect air quality?

**Response:** I believe the reforms contained in the discussion draft would reduce the likelihood that the program will be a barrier to the implementation of beneficial projects, such as energy efficiency projects. The reforms would not affect any of the numerous other air quality management programs and tools that air regulators will continue to have at their disposal to ensure air quality protection.

2. An important component of the NSR program focuses on how an owner determines if a potential project will cause an emissions increase, thereby requiring an owner to obtain an NSR preconstruction permit.

- a. Why is the NSR program's current annual emission projection approach problematic for determining whether an emissions increase will occur?

**Response:** As noted above, the current annual emissions projections approach can be a disincentive to certain projects that improve facility operations and result in environmental benefits – most notably, energy efficiency projects. The current approach also causes confusion because it is inconsistent with the emissions test used in the NSPS program. The discussion draft would help address both problems.

- b. Are there scenarios where the EPA's annual emission projection approach will predict on paper that a project will cause an emissions increase when in reality the project will not actually cause an emissions increase?

**Response:** Because the current annual emissions projection is a projection, it is possible that the actual emissions resulting from the implementation of a project would be less than initially anticipated. This is particularly the case for the current "actual-to-projected-actual" applicability test which relies on the source's pre-project estimates of future actual operating conditions and emissions.

3. Some opponents of NSR reform believe that the NSR program is a critical program to force existing sources to adopt new pollution control technologies.

- a. Besides the NSR program, what other Federal and State programs exist that can require or incentivize a facility to adopt new pollution control technologies?

**Response:** The discussion draft under consideration does not change the control technology component of the NSR program. As such, NSR will continue to be an emissions control program that requires sources to adopt state of the art pollution control technologies as appropriate and necessary. In addition to NSR, there are many other Federal and State programs authorized by the Clean Air Act that require or incentivize air pollution controls. Examples include:

- State plans developed pursuant to CAA § 110, including minor NSR programs

- New Source Performance Standards developed pursuant to CAA § 111
  - National Emissions Standards for Hazardous Air Pollutants pursuant to CAA § 112
  - The Acid Rain Program established under title IV of the CAA
  - Interstate transfer programs established under the ‘good neighbor’ provisions of CAA § 110 (e.g., the Cross-State Air Pollution Rule)
  - The Regional Haze Program under CAA § 169
4. The current NSR program has been characterized as “self-implementing,” meaning that companies are able to determine the applicability of NSR requirements on their own and do not require preapproval from the EPA before carrying out projects at existing facilities that do not trigger NSR. Is there anything in the discussion draft that would undermine the self-implementing nature of the NSR program?

**Response:** As currently drafted, the discussion draft reforms are not expected to affect the self-implementing nature of the NSR program.

**The Honorable Frank Pallone, Jr.**

1. Mr. Wehrum, at the hearing you committed to sharing the Office of Air and Radiation’s comments on the recent Strengthening Transparency in Regulatory Science proposed rule. Please provide the Committee with those comments.

**Response:** During the intra-agency deliberative process to develop the proposal, the Office of Air and Radiation’s immediate office worked with senior leadership in its respective programs to solicit verbal feedback regarding the potential implications of the concepts in the proposal on program priorities. This feedback was provided to the proposal development team prior to interagency review.

**The Honorable Debbie Dingell**

On January 25th, EPA issued guidance that reversed the long standing “once in, always in” policy for major sources of hazardous air pollutants. In response, I sent EPA a letter in April, along with 86 colleagues, calling for the decision to be reversed.

In April, Administrator Pruitt told this committee that EPA conducted a review to determine which sources, and how many, would be covered by this policy change, and the magnitude of hazardous air pollution that could increase as a result.

1. Mr. Wehrum, did this review take place? If yes, when was it conducted, and is it publicly available? Please provide a copy of EPA’s analysis.

**Response:** The January 25, 2018 Wehrum guidance memo builds upon a 2007 proposed rule that addressed the same issue. In that proposal, EPA asserted that, “The environmental, economic, and energy impacts of the proposed amendments cannot be quantified without knowing which sources will avail themselves of the regulatory provisions proposed in this



rule and what methods of HAP emission reductions will be used. It is unknown how many sources would choose to take permit conditions that would limit their PTE to below major source levels.

Within this group it also is not known how many sources may increase their emissions from the major source MACT level (assuming the level is below the major source thresholds). Similarly, we cannot identify or quantify the universe of sources that would decrease their HAP emissions to below the level required by the NESHAP to achieve area source status.” (72 FR 77, January 3, 2007). In the 2007 proposed rule, EPA concluded that, “we believe it is unlikely that a source that currently emits at a level below the major source thresholds as the result of compliance with a MACT standard would increase its emissions in response to this rule. However, even if such increases occur, the increases will likely be offset by emission reductions at other sources that should occur as the result of this proposal. Specifically, this proposal provides an incentive for those sources that are currently emitting above major source thresholds and complying with MACT, to reduce their HAP emissions to below the major source thresholds.” (72 FR 73-74, January 3, 2007).

In a recent report released by the Union of Concerned Scientists, 7 industrial facilities in my district alone could release an additional 155 tons of hazardous air pollutants per year with the rescission of this policy. It is still not clear whether EPA has looked at the full ramifications and potential health effects of this decision. At the April 26th hearing, Administrator Pruitt did not know whether EPA had analyzed the potential health effects of this policy, and pledged to “assess and provide” more information. I am still waiting for a response.

2. A. Mr. Wehrum, yes or no, before releasing the January 25th guidance did EPA conduct any scientific analysis of the potential human health effects of this decision?

**Response:** As explained above, EPA looked at the implications of the policy in the 2007 proposal and found it was “unlikely that a source that currently emits at a level below the major source thresholds as the result of compliance with a MACT standard would increase its emissions in response to this proposal.”

EPA is aware of the Union of Concerned Scientists report referenced in your question. As we noted in the 2018 Memo, EPA anticipates that it will be publishing a Federal Register notice to take comment on adding regulatory text that will reflect EPA’s plain language reading of the statute. Further, as we proceed through the rulemaking process, we will prepare appropriate economic and other analyses with respect to the action and provide details about the length of the comment period and location of any public hearing.

3. If your answer to 2a is yes, when was the analysis conducted, and is it publicly available? Please provide a copy of this analysis to the Committee.

**Response:** See above.

4. If your answer to 2a is no, has EPA conducted such an analysis since releasing the January 25th guidance?

**Response:** See above

GREG WALDEN, OREGON  
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY  
RANKING MEMBER

ONE HUNDRED FIFTEENTH CONGRESS  
**Congress of the United States**  
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WASHINGTON, DC 20515-6115  
Majority (202) 225-2927  
Minority (202) 225-3641

June 25, 2018

Mr. Sean Alteri  
Director, Division for Air Quality  
Kentucky Department of Environmental Protection  
300 Sower Boulevard, 2nd Floor  
Frankfort, KY 40601

Dear Mr. Alteri:

Thank you for appearing before the Subcommittee on Environment on May 16, 2018, to testify at the hearing entitled "Legislation Addressing New Source Review Permitting Reform."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Monday, July 9, 2018. Your responses should be mailed to Kelly Collins, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to [kelly.collins@mail.house.gov](mailto:kelly.collins@mail.house.gov).

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,



John Shimkus  
Chairman  
Subcommittee on Environment

cc: The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment

Attachment



MATTHEW G. BEVIN  
GOVERNOR

**ENERGY AND ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

300 SOWER BOULEVARD  
FRANKFORT, KENTUCKY 40601  
July 9, 2018

CHARLES G. SNAVELY  
SECRETARY

ANTHONY R. HATTON  
COMMISSIONER

Ms. Kelly Collins, Legislative Clerk  
Committee on Energy and Commerce  
2125 Rayburn House Office Building  
Washington, D.C. 20515

Dear Ms. Collins:

On May 16, 2018, I appeared before the Subcommittee on Environment to testify at the hearing entitled, "Legislation Addressing New Source Review Permitting Reform." Included in this letter, please find my responses to Chairman John Shimkus' additional questions for the record.

**The Honorable John Shimkus**

1. Do you think this discussion draft under consideration today reforms the NSR program while still ensuring air regulators have the tools they need to protect air quality?

Yes. The discussion draft under consideration limits the emissions increases to the maximum achievable hourly emission rate demonstrated in the last ten years. This limitation will provide the necessary enforceable conditions to protect the relevant National Ambient Air Quality Standards.

2. An important component of the NSR program focuses on how an owner determines if a potential project will cause an emissions increase, thereby requiring an owner to obtain an NSR preconstruction permit.

- a. Why is the NSR program's current annual emission projection approach problematic for determining whether an emissions increase will occur?

The annual emission projections disincentivizes energy efficiency projections that would lead to an increase in performance, demand, and utilization. The increased utilization of a facility may increase annual amounts; however, a project would actually reduce the amount of any air pollutant emitted by the source per unit of output after implementation of efficiency measures.

- b. Are there scenarios where the EPA's annual emission projection approach will predict on paper that a project will cause an emissions increase when in reality the project will not actually cause an emissions increase?

Yes. For instance, the widely-accepted emission factors developed and utilized for predicting emissions of PM<sub>2.5</sub> from the combustion of natural gas are conservative by an order of magnitude. The conservative emission factors often trigger NSR applicability, although post-construction monitoring and performance testing often reveal that the actual emissions increase remained below the significant emissions rate increase.

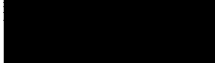
3. Some opponents of NSR reform believe that the NSR program is a critical program to force existing sources to adopt new pollution control technologies.

- a. Besides the NSR program, what other Federal and State programs exist that can require or incentivize a facility to adopt new pollution control technologies?

The General Duty to prohibit a facility from violating, or interfering with the attainment or maintenance of, ambient air quality standards may require or incentivize a facility to adopt new air pollution control technologies beyond what may be required through the applicability of a standard. Also, a new, modified, or reconstructed facility may be required to install new air pollution control equipment by the New Source Performance Standards established under Section 111 of the Clean Air Act. Likewise, an existing facility may be incentivized to install new air pollution control technologies through a state plan issued under Section 111(d) of the Act. Further, the National Emission Standards for Hazardous Air Pollutants often requires facilities to install additional air pollution control equipment.

If you have questions regarding these responses, please do not hesitate to contact me at your convenience.

Sincerely,



Sean Alteri, Director  
Division for Air Quality

GREG WALDEN, OREGON  
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY  
RANKING MEMBER

ONE HUNDRED FIFTEENTH CONGRESS  
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Minority (202) 225-3641

June 25, 2018

Mr. Ross E. Eisenberg  
Vice President, Energy and Resources Policy  
National Association of Manufacturers  
733 10th Street, N.W.; Suite 700  
Washington, DC 20001


Dear Mr. Eisenberg:

Thank you for appearing before the Subcommittee on Environment on May 16, 2018, to testify at the hearing entitled "Legislation Addressing New Source Review Permitting Reform."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Monday, July 9, 2018. Your responses should be mailed to Kelly Collins, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to [kelly.collins@mail.house.gov](mailto:kelly.collins@mail.house.gov).

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,



John Shimkus  
Chairman  
Subcommittee on Environment

cc: The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment

Attachment



Ross E. Eisenberg  
Vice President  
Energy & Resources Policy

July 6, 2018

The Honorable John Shimkus  
Chairman  
Subcommittee on Environment  
Committee on Energy and Commerce  
U.S. House of Representatives  
Washington, DC 20515

The Honorable Paul Tonko  
Ranking Member  
Subcommittee on Environment  
Committee on Energy and Commerce  
U.S. House of Representatives  
Washington, DC 20515

Dear Chairman Shimkus and Ranking Member Tonko:

Thank you for your follow-up questions for the record from the Subcommittee's recent hearing, "Legislation Addressing New Source Review Permitting Reform." Enclosed are my responses. The National Association of Manufacturers looks forward to working with the Subcommittee on these and other issues affecting manufacturers.

Sincerely,

A black rectangular box redacting the signature of Ross Eisenberg.

Ross Eisenberg  
Vice President  
Energy and Resources Policy

*Leading Innovation. Creating Opportunity. Pursuing Progress.*

733 10<sup>th</sup> Street, NW, Suite 700, Washington, DC 20001 P 202-637-3173 F 202-637-3182 [www.nam.org](http://www.nam.org)

RESPONSES TO QUESTIONS FOR THE RECORD  
ROSS EISENBERG, NATIONAL ASSOCIATION OF MANUFACTURERS

HOUSE COMMITTEE ON ENERGY AND COMMERCE, SUBCOMMITTEE ON ENVIRONMENT  
HEARING ON "LEGISLATION ADDRESSING NEW SOURCE REVIEW PERMITTING REFORM"

MAY 16, 2018

Question from the Honorable John Shimkus (R-IL)

1. An important component of the NSR program focuses on how an owner determines if a potential project will cause an emissions increase, thereby requiring an owner to obtain an NSR preconstruction permit.

- a. Why is the NSR program's current annual emissions projection approach problematic for determining whether an emissions increase will occur?

Manufacturers have struggled for many years with the way the Environmental Protection Agency (EPA) has interpreted its regulations concerning emissions accounting during the two-step NSR applicability determination process. One such challenge stems from a requirement that manufacturers consider only a project's emission increases—and not its decreases—in determining whether Step 1 of the NSR is triggered. Decreases can only be considered during Step 2 of NSR in the context of "plant-wide netting," which can be a time-consuming and costly process for a manufacturer to undertake.

- b. Are there scenarios where the EPA's annual emission projection approach will predict on paper that a project will cause an emissions increase when in reality the project will not cause an emissions increase?

That is correct. Such scenarios could occur when a manufacturer takes on a project that would result in switching of fuels, such as a project to replace an oil-fueled process heater with a natural gas-fired process heater. Although the overall project would result in significantly lower emissions of nitrogen oxides (NOx), the emissions decreases would not be counted during Step 1 of NSR; only the additional NOx that would occur from the natural gas process heater may be counted. Step 1 of NSR therefore results in an emission increase on paper, when the project would actually result in an emission decrease.

2. Some opponents of NSR reform believe that the NSR program is a critical program to force existing sources to adopt new pollution control technologies.

- a. Besides the NSR program, what other Federal and State programs exist that can require or incentivize a facility to adopt new pollution control technologies?

As Mr. Holmstead testified at the above-referenced hearing, there are no less than 13 other Clean Air Act programs that regulate the same pollutants covered by NSR.

In addition, the Energy Policy Act of 2005, the Energy Independence and Security Act of 2007 and the energy portions of the American Reinvestment and Recovery Act of 2009 all enacted multitudes of federal programs to research, develop and deploy new technologies that have helped manufacturers reduce their emissions. NAM member companies participate actively with the Department of Energy (DOE) and the EPA on legacy programs like the Better Plants Initiative, the Diesel Emissions Reduction Act, energy saving performance contracts and the many resources available to manufacturers at the national laboratories.

Finally, it is worth acknowledging that decisions to invest in new capital can be triggered by forces other than environmental policy. Tax and trade policies are excellent examples.

**b. Additionally, what are the scenarios where existing facilities may choose to adopt new pollution control technologies for reasons other than being required to by government regulation?**

The first is the suite of voluntary programs managed by the DOE's Advanced Manufacturing Office—programs the NAM is actively promoting with our membership. We recently announced a partnership with the DOE, called the Sustainability in Manufacturing Initiative, whereby we will help the DOE with its outreach to the manufacturing community. We have seen a great deal of our members become partners with the DOE's Better Plants Program, a voluntary program to improve energy efficiency in the industrial sector. Better Plants partners set a goal and DOE helps them achieve it. A typical goal is a 25 percent improvement in energy intensity over 10 years.

Similarly, we are hearing from our members that the recently-passed tax reform package is providing opportunities to upgrade to more efficient equipment and reduce emissions. One of the challenges with using Clean Air Act regulations as the driver of change is that the regulations typically only apply to new sources of emissions. It is much more difficult, as we have learned from the Clean Power Plan, to make changes to the existing stock of equipment. Provisions in the tax reform package such as full and immediate expensing are changing the internal rate of return on energy efficiency projects and making them more compelling for manufacturers, which is incentivizing manufacturers to upgrade their existing equipment. The NAM is still investigating the emissions reduction potential of the tax reform law, but we have already heard several positive stories from our members in this regard.



GREG WALDEN, OREGON  
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY  
RANKING MEMBER

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**Congress of the United States**  
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Majority (202) 225-2927  
Minority (202) 225-3641

June 25, 2018

Mr. Kirk Johnson  
Senior Vice President, Government Relations  
National Rural Electric Cooperative Association  
4301 Wilson Boulevard  
Arlington, VA 22203

Dear Mr. Johnson:

Thank you for appearing before the Subcommittee on Environment on May 16, 2018, to testify at the hearing entitled "Legislation Addressing New Source Review Permitting Reform."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Monday, July 9, 2018. Your responses should be mailed to Kelly Collins, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to [kelly.collins@mail.house.gov](mailto:kelly.collins@mail.house.gov).

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely



John Shimkus  
Chairman  
Subcommittee on Environment

cc: The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment

Attachment



---

July 9, 2018

The Honorable John Shimkus  
Chairman, Subcommittee on Environment  
House Committee on Energy and Commerce  
2125 Rayburn House Office Building  
Washington, DC 20515

Chairman Shimkus:

Thank you again for the opportunity to testify at the May 16<sup>th</sup> hearing entitled "Legislation Addressing New Source Review Permitting Reform."

Please find enclosed my responses to your questions for the record.

Sincerely,



Kirk Johnson  
Senior Vice President for Government Relations  
National Rural Electric Cooperative Association



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Responses to Questions for the Record for Chairman John Shimkus

Kirk Johnson  
Senior Vice President for Government Relations  
National Rural Electric Cooperative Association

July 9, 2018

The comments below in 1a. and 1b. specifically address your questions as they relate to the existing New Source Review (NSR) regulatory program. While some partial solutions are outlined below, the underlying problems with the existing program that discourage commonsense facility repairs and replacements to allow continued economic and reliable operation remain and would likely remain so unless the definition of NSR modification is changed. The best way to accomplish this change and ensure that it remains part of the NSR regulatory program is to insert clarifying and unambiguous language in the Clean Air Act statute. The language in the draft discussion bill before your subcommittee would provide such language defining modification that would effectively overcome NSR regulatory barriers addressed below.

**Question 1a.**

The current New Source Review (NSR) regulations include a “project future emissions and report system.” This system requires that projects be evaluated prior to construction to project future emissions under anticipated operating conditions after the project completion. If such analysis results in a “significant” emissions increase because of the project, NSR is triggered before construction. If no significant emissions increase is projected, the entity must monitor facility emissions after project completion to ensure no significant emission increase has occurred.

There are many factors that can make future emissions projections challenging, but it’s EPA’s interpretation of the requirements under this program that makes it problematic.

For example, the regulations require emissions increases attributable to “demand growth” where the facility was already “capable of accommodating” the increase without the project or facility modification to be excluded from future emissions projections for determining whether actual emissions have increased because of the project. In contested cases, EPA often disagrees with the entity’s calculations regarding the demand growth accommodation and the associated emissions increase. Additionally, EPA has alleged entity failure to include other emission increases associated with reduced maintenance outages and dispatch order elevation leading to increase facility utilization because of the project. This agency “second guessing” of a facility’s pre-project emissions calculations, even when actual data on facility operation after of construction is not yet available, is a major concern and can be a driver in NSR enforcement actions.

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A reasonable reading of the statute and the ensuing NSR regulations seemingly dictates that NSR violations can only occur if a facility modification results in a significant emissions increase. However, in one recent EPA enforcement action, EPA “second guessed” an emissions projection that resulted in an NSR violation even though post project emissions *did not result in any emissions increase, in fact emissions decreased*.

**Question 1b.**

Yes, as detailed above there are certainly scenarios where EPA projections of post project future emissions will be wrong. The DTE Energy Monroe 2 electric generating facility and recent related NSR litigation is a case in point where there was an emission decrease at the facility, but an NSR violation was found nonetheless.

This is not to say entities acting in good faith cannot wrongly project future emissions. The simple solution is if post project emissions “significantly” increase (as defined in the regulations) because of the project, the facility undergoes NSR at that time. Seemingly the current NSR regulations require just that. Additionally, entities should not be subject to NSR violations if in fact there was no emissions increase regardless of EPA calculations to the contrary.

**Question 2a.**

NRECA believes the NSR program addressing existing source modifications has contributed very little to the fossil-fuel fired electric generation fleet pollution control retrofits. Since 1992 the electric utility industry has spent \$133 billion on a 2016-dollar basis on capital investments for retrofitting existing units. Major drivers for these actions include Acid Rain Control, National Ambient Air Quality Standards (NAAQS) for ozone and particulate control, mandates including addressing interstate air pollution, Utility Maximum Available Control Technology (UMACT) standards, and Regional Haze mandates. The timing of the installation of these controls syncs with the regulatory mandates under these programs and demonstrates that a very small percentage of these total retrofits can be reasonably attributed to NSR enforcement programs.

Under the Federal Clean Air Act, states and their political subdivisions can impose emission controls on stationary sources that are more stringent than federal mandates. States do impose emission control requirements in accordance with their state implementation plans to address federal Clean Air Act NAAQS attainment and other issues. But NRECA is not aware of state specific programs that exceed Federal Clean Air Act requirements aside from several regional greenhouse gas mitigation programs.

**Question 2b.**

As referenced above, since most electric utility entities have been under continuing legal mandates to install additional emission controls over the past several decades, there is little incentive to go

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above and beyond mandated requirements that would ultimately result in saddling electric consumers with additional costs for electric service. However, there are several instances when an entity might install or enhance pollution control technologies above that required by government regulation. The most obvious example is the installation or enhancement of emissions controls to create emission credits for either emissions averaging with other facilities or to sell. Another example is the enhancement of emission controls to increase a byproduct for use or sale as a feedstock. Some electric utilities utilize flue gas desulfurization (FGD) units coupled with forced oxidation to produce gypsum as a byproduct for wall board manufacturing. Their incentive is to maximize sulfur dioxide removal in amounts not necessarily required by regulatory mandate to increase gypsum production. Of course, whether increasing emissions reductions to emissions average or to increase feedstock for other uses, economics dictates cost effectiveness and thus rationale to do so.

GREG WALDEN, OREGON  
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY  
RANKING MEMBER

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June 25, 2018

Mr. Jeffrey R. Holmstead  
Partner  
Bracewell LLP  
2001 M Street, N.W.; Suite 900  
Washington, DC 20036

Dear Mr. Holmstead:

Thank you for appearing before the Subcommittee on Environment on May 16, 2018, to testify at the hearing entitled "Legislation Addressing New Source Review Permitting Reform."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Monday, July 9, 2018. Your responses should be mailed to Kelly Collins, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to [kelly.collins@mail.house.gov](mailto:kelly.collins@mail.house.gov).

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,



John Shimkus  
Chairman  
Subcommittee on Environment

cc: The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment

Attachment

**Attachment—Additional Questions for the Record**

**The Honorable John Shimkus**

1. An important component of the NSR program focuses on how an owner determines if a potential project will cause an emissions increase, thereby requiring an owner to obtain an NSR preconstruction permit.
  - a. Are there scenarios where the EPA's annual emission projection approach will predict on paper that a project will cause an emissions increase when in reality the project will not actually cause an emissions increase?
2. Some opponents of NSR reform believe that the NSR program is a critical program to force existing sources to adopt new pollution control technologies.
  - a. Besides the NSR program, what other Federal and State programs exist that can require or incentivize a facility to adopt new pollution control technologies?
  - b. Additionally, what are the scenarios where existing facilities may choose to adopt new pollution control technologies for reasons other than being required to by government regulation?
3. The current NSR program has been characterized as "self-implementing," meaning that companies are able to determine the applicability of NSR requirements on their own and do not require preapproval from the EPA before carrying out projects at existing facilities that do not trigger NSR. Is there anything in the discussion draft that would undermine the self-implementing nature of the NSR program?